Panasonic

TECHNICAL DATA & SERVICE MANUAL

Air Conditioning Intelligent Management System

P-AIMS

P-AIMS

Service Technical Information is a supplement to the operation manuals supplied with the software. For any information not included in this Service Technical Information, refer to the operation manuals supplied with the software.

Applicable Software:
- Basic Software
- Distribution Ratio Software
- Layout Display Software

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1. Before Use

- License authentication needs to be performed for the P-AIMS system.You can use the system for a period of 30 days without performing license authentication.Please perform the license authentication referring to "7. License authentication."
- The P-AIMS system uses Microsoft Excel in order to output files in an editable format. Therefore, we recommend that you install Microsoft Excel on the personal computer on which you will use the P-AIMS system.(Microsoft Excel is part of Microsoft Office.)
- Operation manuals are available as help for the P-AIMS system. However, they are in the PDF file format, so you need to install Adobe Reader.If it is not installed, an error will appear when you attempt to view the Help files.
- The specifications of this software and the content of this manual are subject to change without notice.
- Microsoft, Windows XP, Microsoft Excel, and Microsoft Office are registered trademarks of Microsoft Corporation in the United States and other countries.
- Adobe Reader is a registered trademark or trademark of Adobe System Incorporated in the United States and other countries.
  Other product and company names are trademarks or registered trademarks of the corresponding companies.
  Other products are copyrights of the corresponding companies.
- The adapter names included in the operation manuals and P-AIMS software may be the model names for the Japanese market.In such a case, replace the adapter names with those shown in the table below.

	For Japan	For Overseas in General	For North America
Communication adapter	CZ-10APB3	CZ-CFNC2	CZ-CFUNC1U
Local adapter	SHA-KL4U	CZ-CAPC2	—

2. P-AIMS System Setup Procedure

The following is an overview of the P-AIMS system setup procedure.

1 Complete Test Run of Air Conditioning System
Complete Test Run of Communication Adapters

(1) Sufficiently test the operation of the air conditioning system, and make sure the test run completes properly.
(2) Complete the installation and setup of the communication adapters (p.30).

2 Set Up Personal Computer
Set Up Peripheral Devices

(1) Set up the personal computer (p.6).
(2) Configure UPS automatic shutdown (p.13).
(3) Configure automatic startup of the personal computer (p.16).
(4) Install a USB-232C converter or USB-485 converter (p.10).
(5) Install Microsoft Office and Adobe Reader.

3 Install Software

(1) Install Basic Software (p.19).
License authentication needs to be performed for the P-AIMS system.The Product ID on the "Product ID Issuance Certificate" (supplied with the purchased CD) is required to install the software.
Note: Perform license authentication for all software (including optional software).If you do not perform license authentication, you will no longer be able to use the software after the 30-day trial period elapses.
(2) If you have any optional software, install that software as well (p.25).

4 Configure Master Data Settings

(1) Configure the master settings.
   1. Configure the auxiliary settings (communication line) (p.29).
   2. Register master data such as room names, indoor unit names, outdoor unit names, floor names, control group names, and schedule groups.
   3. Register master data related to optional software.
      If you have installed various optional software, you also need to configure the settings of each software.When Layout Display Software is installed, you need to create layout diagrams separately (p.38).

5 Perform Operation Check

(1) Perform an operation check.
   1. Check the air-conditioning equipment status indication.
   2. Perform checks such as turning on and off the equipment, and check that the corresponding devices are correct.

(2) About distribution
   1. Check whether the corresponding devices are correct.
   2. Check whether the pulse meter is correct.
   3. Check whether the distribution group and tenant are correct.
   4. Perform a test run, and check whether distribution is performed properly.

6 Back Up Data Configure Automatic Backup Settings

(1) Back up the master data (p.54).
   The P-AIMS system includes various backup functions as a countermeasure in the event that the personal computer goes down, so configure the following settings in case the system goes down.
   We recommend connecting an external hard disk to the personal computer, and backing up the data to that hard disk. The same applies for automatic backups.
   1. Back up the database.
   2. If Layout Display Software is installed, back up the layouts.

(2) Configure the automatic backup settings (p.54).
   The backup of (1) is only performed once.If you configure the automatic backup settings, the data will be backed up once every day.

(3) Configure the automatic Excel output settings (p.49).
   If you configure the automatic Excel output settings, the data will be output as Excel data once every day.
   With regards to distribution related data, one month's worth of distribution data will be output as Excel data the day after the cut-off date.

3. Required Equipment and Software Configuration

3-1. P-AIMS system specs

Number of connectable indoor units :Maximum of 1,024
Number of connectable outdoor units :Maximum of 960
Number of lines (for air conditioning equipment) :4 lines (maximum of 512 indoor units per line)
CZ-10APB3 and DDR-3550 can be connected to any and all lines.
However, make sure all of the adapters used on one line are the same device.
CZ-10APB3 (communication adapter) :G/H/J/K Type GHP, T/V/A/B Type PAC, total wire length within 1 km (RS-485)
Maximum of 8 units per line
Indoor units :Maximum of 64 per link, and 2 links per adapter
Outdoor units :Maximum of 30 per link, and 2 links per adapter

3-2. P-AIMS system software configuration

CZ-CSWKC2 (Basic Software :This basic software is mandatory and must be installed)
CZ-CSWAC2 (Distribution Ratio Software
:Accumulated indoor unit thermostat on/off times, distribution calculation, air conditioning usage calculation, and lighting and other usage charge calculations)
CZ-CSWGC2 (Layout Display Software
:Allows display operations to be performed in a layout display screen)
CZ-CSWBC2 (BACnet Communication Software
:BACnet communication with central monitoring devices, support for IPv4 and IPv6)
CZ-CSWWC2 (Web software :Web viewing compatible software)

3-3. Hardware required for P-AIMS system

Personal computer	: 1
UPS (uninterruptible power supply) (including dedicated cable)	: 1
External hard disk (for data backup)	: 1
Communication converter (USB-485)	: Required number
Communication converter (USB-232C)	: Required number
Printer (including printer cable)	: 1

3-3-1. Selection method for communication converters

The communication method depends on the adapters
CZ-10APB3 (communication adapter) => RS-485 (for new monitoring system)
Number of ports required for communication on the personal computer (including USB)
RS-232C for UPS: 1
Adapter related communication devices (CZ-10APB3): Same as number of ines
For External HDD and USB printer: 2 (USB)
For example, if you use CZ-10APB3 and insert three lines into the personal computer, the number of communication lines required is one for the UPS (one RS-232C), and three for the communication adapters (RS-485).Also, in the case RS-485, three for USB-485 for using the USB-485 converters, one for the external hard disk, one for the USB printer, and one for the external hard disk needed when maintenance is performed, so a total of at least six USB are required.(If there is no RS-232C on the personal computer, seven USB ports, one USB-232C converter, and three USB-485 converters are required.)

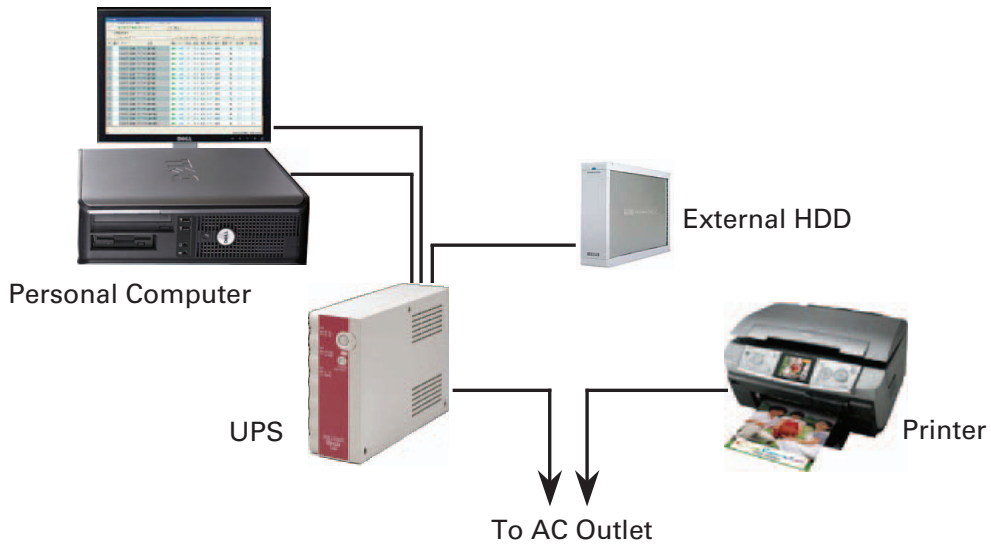
3-3-2. Personal computer specs and recommended equipment

Personal computer specs

Operating system	:Windows XP Professional
CPU	:Intel Pentium 4 processor
Memory	:2 GB or more
CPU clock	:3.0 GHz or faster (However, a PC for factory automation is recommended for BACnet.)
CRT	:1,024 x 768
External HDD	:100 GB or more (An external power supply type is preferable because the HDD will be used for backing up data.)
UPS	:A type that supports the UPS service included with Windows XP by default is recommended.

4. Hardware Configuration

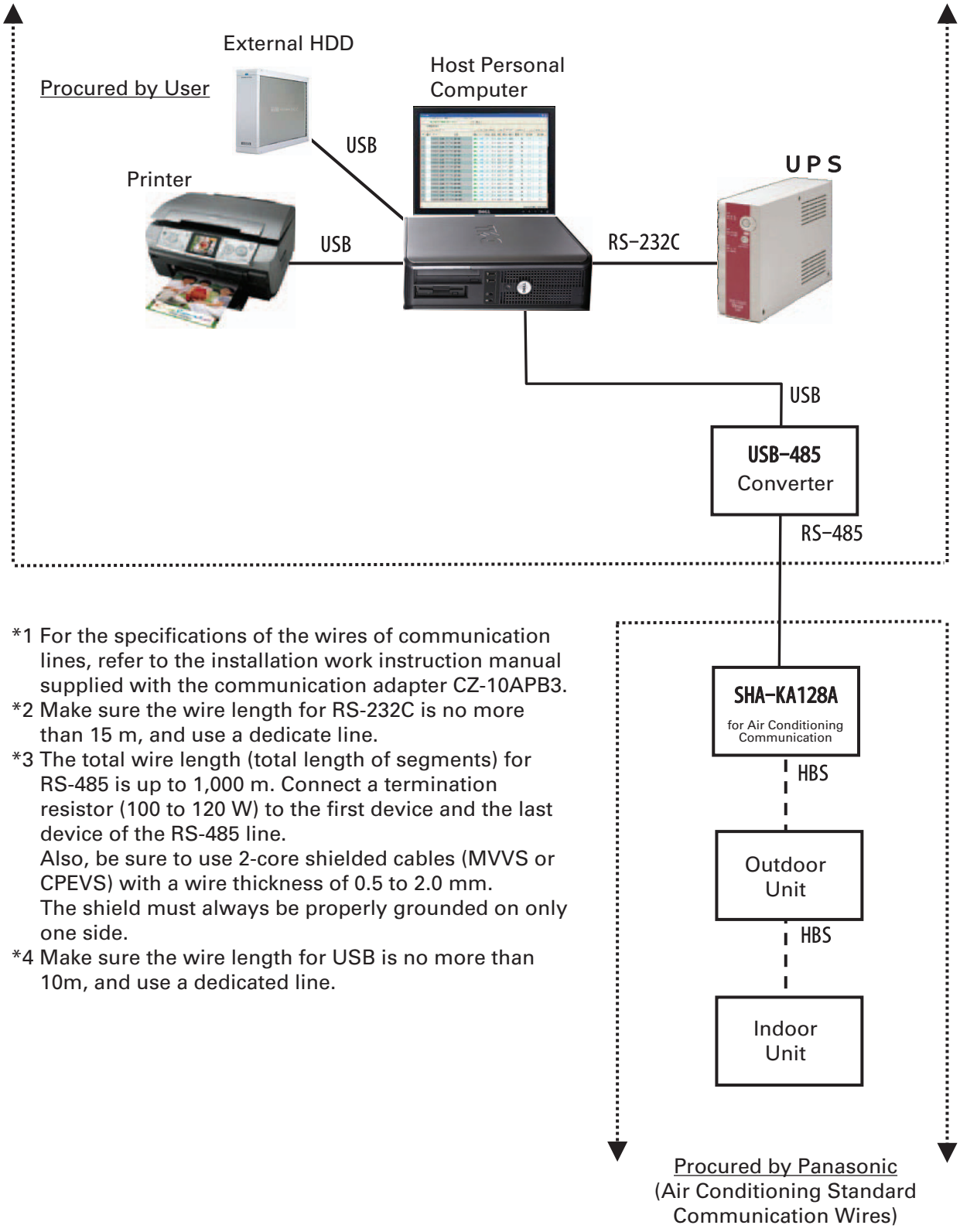
4-1. Connection method for power supply line



*1 This connection method is for when the recommended equipment is used. If different equipment is used, refer to the operation manuals supplied with the equipment and then connect the power line.

*2 For a newly purchased personal computer, connect the CRT, keyboard, mouse, and other peripheral devices while referring to the operator's manual supplied with the personal computer.

4-2. Connection method for signal line

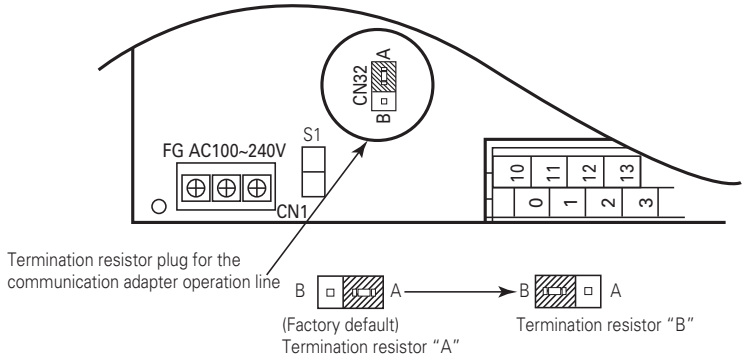


*1 For the specifications of the wires of communication lines, refer to the installation work instruction manual supplied with the communication adapter CZ-10APB3.
*2 Make sure the wire length for RS-232C is no more than 15 m, and use a dedicate line.
*3 The total wire length (total length of segments) for RS-485 is up to 1,000 m. Connect a termination resistor (100 to 120 W) to the first device and the last device of the RS-485 line.
Also, be sure to use 2-core shielded cables (MVVS or CPEVS) with a wire thickness of 0.5 to 2.0 mm.
The shield must always be properly grounded on only one side.
*4 Make sure the wire length for USB is no more than 10m, and use a dedicated line.

Note: About Termination Resistors for RS-485 Wiring

Termination resistors are always required at the equipment (two) at both ends when equipment is wired in a daisy chain with RS-485.
Check the installation instruction manual for each piece of equipment, and make sure you attach the termination resistors to the equipment properly.

- In the case of a communication adapter (CZ-10APB3):
  (1) On the communication adapter at the end of an RS-485 daisy chain, switch the termination resistor plug for the communication adapter operation line on the top right of the power supply terminal block to the B side.In the check list, write the number of the communication adapter for which the termination resistor was turned on.



(At the time of shipment from the factory, the termination resistor is set to the A side.)

4-3. Function list

A maximum of 1,024 indoor units can be connected.
A maximum of 960 outdoor units can be connected.

Type of Air Conditioner	Required Adapter	Operation Display Functions						Display		
		On/Off	Cooling/Heating Modes	Temperature Display	Fan Speed	Airflow Direction	Central Control	Alarms	Room Temperature	Thermostat On Time
PAC : B, A, U, and T Types GHP : K, J, H, and G Types	CZ-10APB3	○	○	○	○	○	○	○	○	○
Other Models	CZ-10APB3 SHA-KL4U	○	—	—	—	—	—	○	—	○

*1: GHP: Not possible for F and E types.
*2: Connection of existing communication lines possible.

5. Personal Computer Setup

5-1. Personal computer setup

Windows setup work is required the first time you turn on the power of the personal computer.
The name of the operator who will use the personal computer needs to be entered during the Windows setup.Decide the name to register.
The setup varies depending on the personal computer purchased, so refer to the "Windows Setup" instruction manual supplied with the personal computer.

Cautions for Windows Setup
- Do not connect the peripheral devices.
- Do not connect the LAN cable.
- Do not change the system settings.
- Do not turn off the power part way through.
- Do not leave the setup unattended.

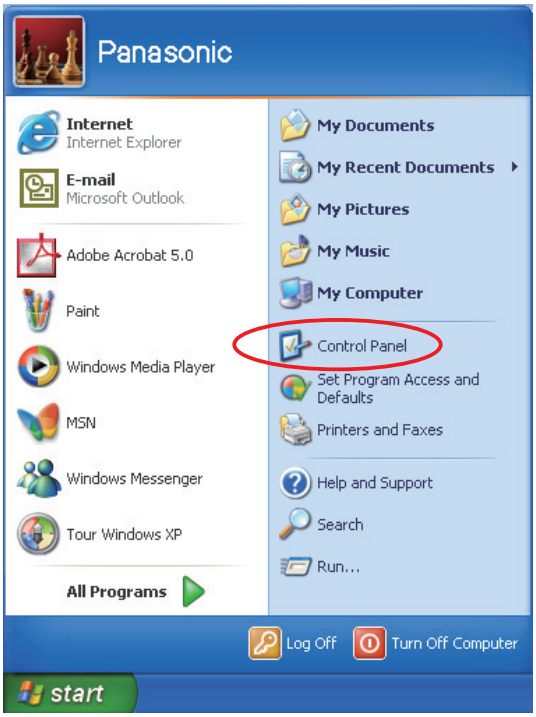
5-2. Disabling system standby and system hibernation

When the P-AIMS system is running, mouse and keyboard operations are not normally performed.However, if the mouse or keyboard is not operated, the personal computer stops or hibernates in order to save power and protect the devices.In such a state, the operating system is stopped, and the P-AIMS system is also stopped.The primary functions of the P-AIMS system are to monitor and manage the air conditioning equipment 24 hours per day, so it is necessary to disable the system standby and system hibernation functions because the P-AIMS system is unable to fulfill its purpose while they are enabled.

The applicable operating system is Windows XP Professional.
If you set the items of [At the Same Time] when configuring the UPS for a power failure, skip the following settings.

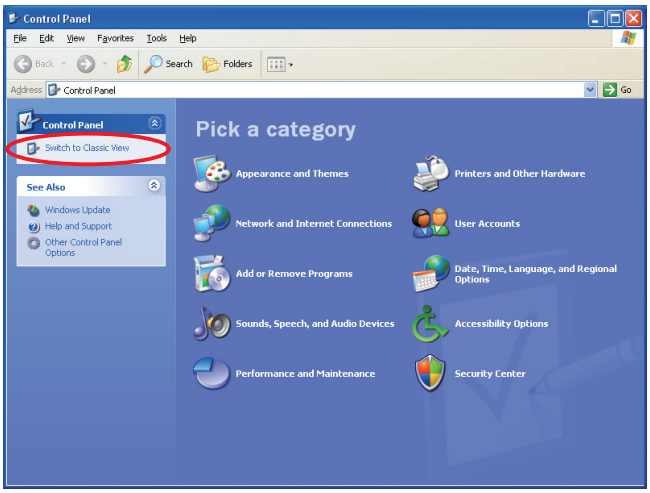
(1) Click start in the bottom left of the screen.

Click "Control Panel" in the menu that appears.



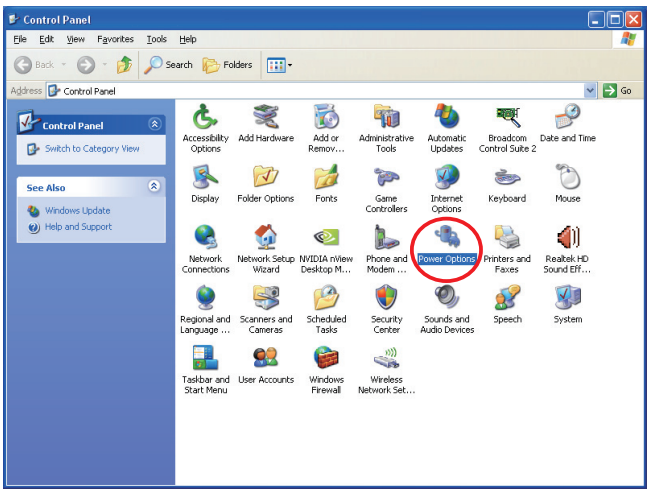
(2) The Control Panel window appears.

If the display is as shown in the figure on the right, click "Switch to Classic View" to change the display method.If the display is as shown in (3), it does not need to be clicked.



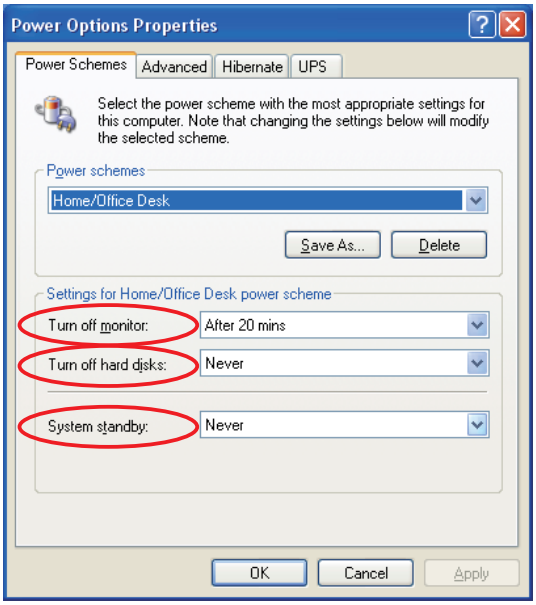
(3) The classic view type of the Control Panel appears.

Double-click "Power Options."



(4) The Power Options Properties dialog box appears. Set "Turn off monitor," "Turn off hard disks," "System standby," and "System hibernates" (this setting is not available on some personal computers) to "Never."

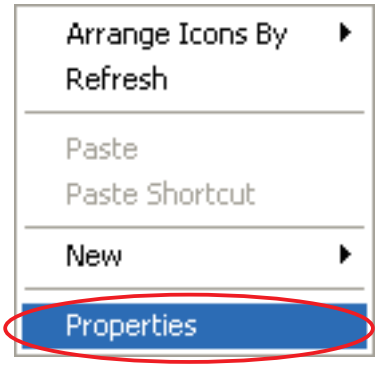
(5) Click OK.
The system standby and system hibernates settings are disabled.
Close the Control Panel window.



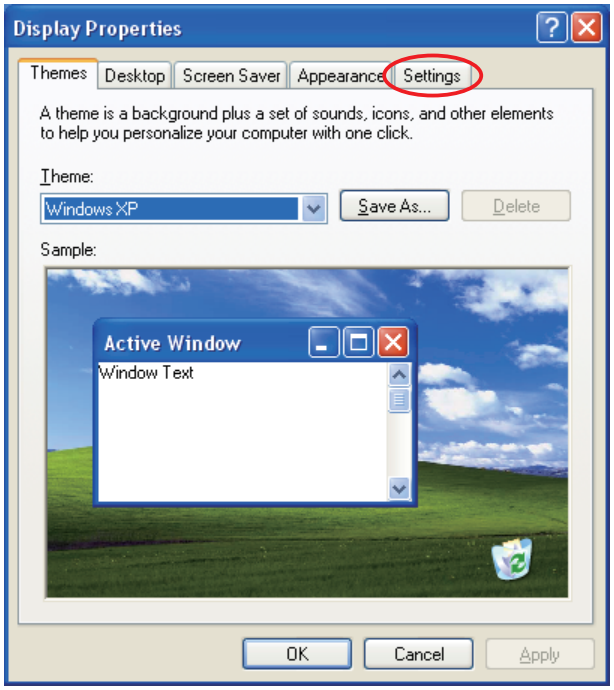
5-3. Screen resolution setting

The P-AIMS system uses a screen size of 1,024 by 768.The resolution may differ depending on the personal computer, so check the resolution and change it if necessary as described below.

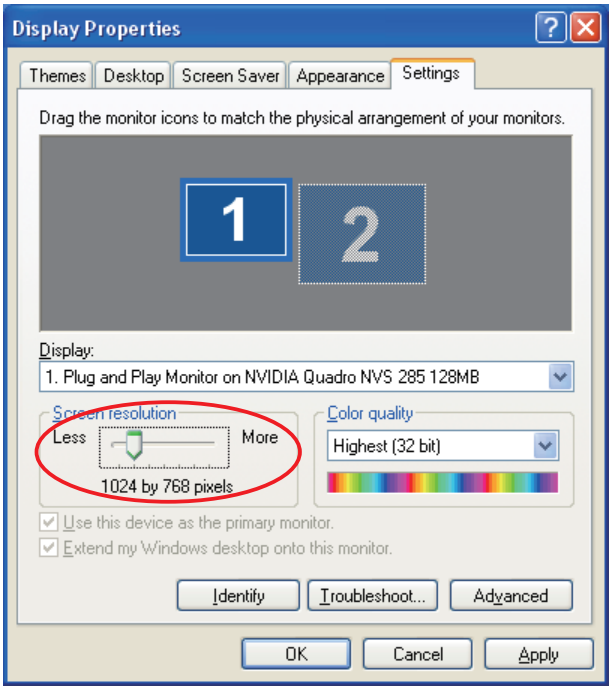
(1) Move the mouse pointer over the screen, and right-click to display the sub menu shown on the right. Click Properties (figure on the right).



(2) The Display Properties dialog box appears.
Click the Settings tab.



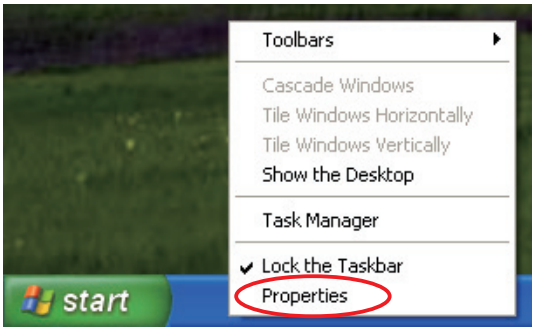
(3) The window for changing the screen resolution appears. Use the slider indicated by the red circle to adjust the resolution to 1024 by 768.After you finish adjusting the resolution, click OK to complete the setting.



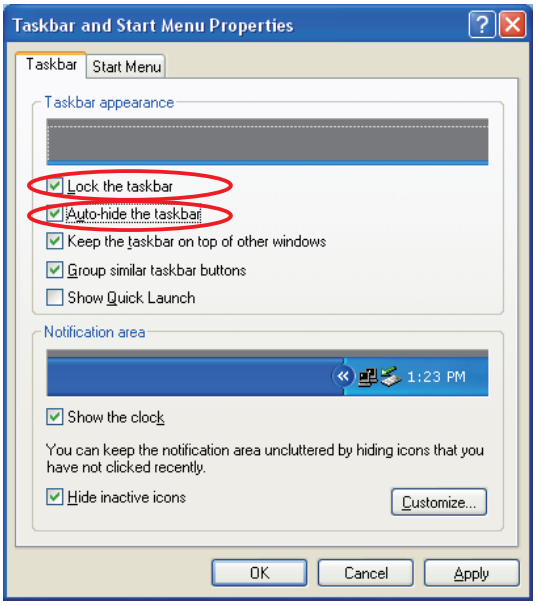
5-4. Setting for auto-hiding taskbar

The P-AIMS system is designed to be used with the taskbar at the bottom of the screen set to be hidden.There is no problem with operation when the taskbar is displayed, but the visual appearance and operability may be slightly worse.

(1) Move the mouse pointer over the taskbar, and right-click to display the sub menu.
Click Properties.



(2) The Taskbar and Start Menu Properties dialog box appears.
Select both of the "Lock the taskbar" and "Auto-hide the taskbar" checkboxes.
Click OK to complete the setting.



* When this setting is set, the taskbar disappears from the screen, but the taskbar can be displayed by moving the mouse pointer to the very bottom of the screen.
However, if you are still unable to display the taskbar, press the Windows key, The Start menu of Windows opens.

Windows key

6. Peripheral Devices

6-1. Selection of communication converters

The communication method to use depends on the adapters to be used.Refer to the following when selecting the communication converter to use.

CZ-10APB3 (communication adapter) => RS-485 (for new monitoring system)

The quantity is the same as the number of lines to be input to the personal computer.(However, this is when no consideration is given to RS-232C for UPS.)

6-1-1. About communication converters

(1) With the P-AIMS system, connections with adapters or UPS are made via RS-485 and RS-232C communication ports.However, a personal computer is generally equipped with one RS-232C port, and no RS-485 ports.That is why it is necessary to use communication converters (USB-232C converter, USB-485 converter, etc.).
A communication converter is equipment that enables equipment connected to the communication converter to use it as RS-232C or RS-485 ports when its connector is inserted into a USB port. The driver supplied with the equipment needs to be installed.

(2) To prevent a malfunction, be sure to use a USB-232C converter, USB-485 converter, or other converter that is an insulation type communication converter.
Also, a type whose COM number does not change when inserted in a different USB port is recommended for a USB-232C or USB-485 converter.

6-1-2. Installation of communication converter

If you insert the communication converter into a USB port, the Found New Hardware Wizard dialog box appears.
Install the driver of the communication converter.

6-1-3. Confirmation method for COM port number of communication converter

When you install a communication converter as described in the section above, it is necessary to confirm the COM port number that has been assigned to that equipment.
The assignment is generally as shown below.

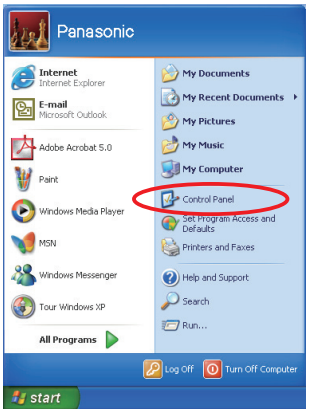
COM1: (Assigned for the personal computer by default even if no other device is installed.)
COM2: (Assigned for the personal computer by default even if no other device is installed.)
COM3: (Assignment is possible from this port number.)

Note down this assigned port number in order to specify it for the P-AIMS system.

[COM number confirmation]

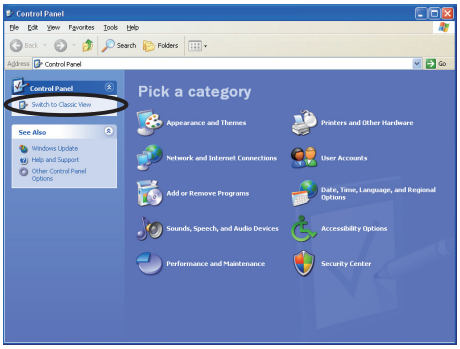
(1) Click start in the bottom left of the screen.

Click "Control Panel" in the menu that appears.



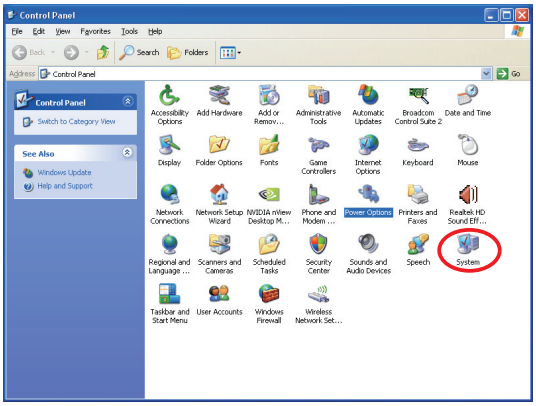
(2) The Control Panel window appears.

If the display is as shown in the figure on the right, click "Switch to Classic View" to change the display method. If the display is as shown in (3), it does not need to be clicked.



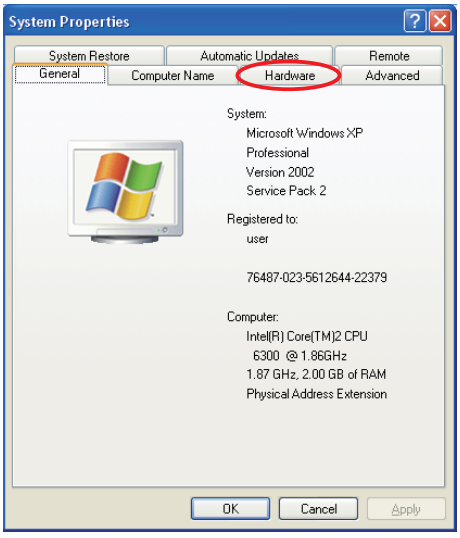
(3) The classic view type of the Control Panel appears.

Double-click "System."



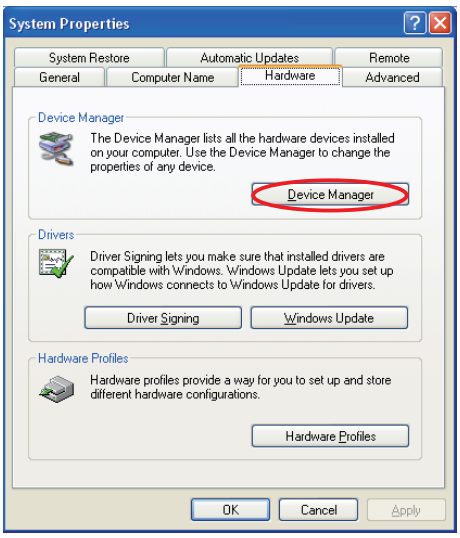
(4) The System Properties dialog box appears.
Click the Hardware tab.

These properties also allow you to see the version of the operating system, specs of the personal computer, and other information.

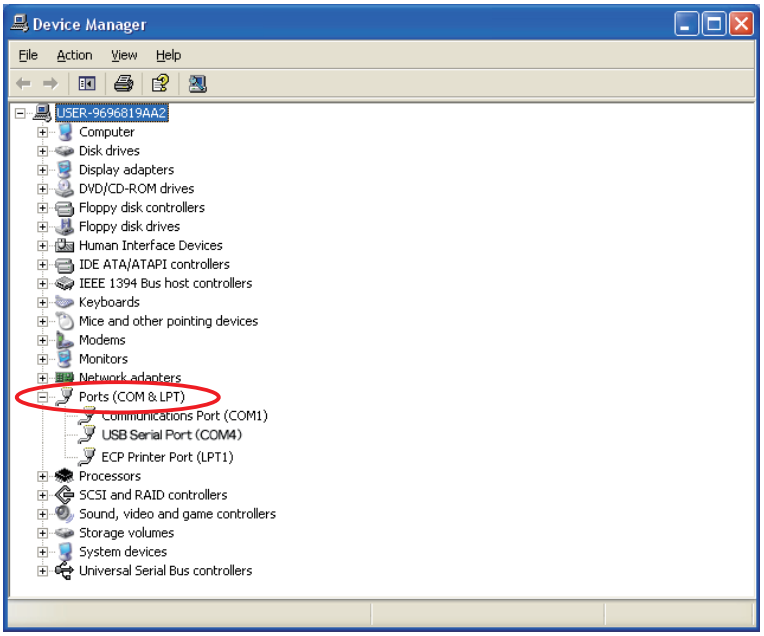


(5) The Hardware tab appears.

Click "Device Manager."


System Properties
System Restore
Automatic Updates
Remote
General
Computer Name
Hardware
Advanced
Device Manager
The Device Manager lists all the hardware devices installed on your computer. Use the Device Manager to change the properties of any device.
Device Manager
Drivers
Driver Signing lets you make sure that installed drivers are compatible with Windows. Windows Update lets you set up how Windows connects to Windows Update for drivers.
Driver Signing
Windows Update
Hardware Profiles
Hardware profiles provide a way for you to set up and store different hardware configurations.
Hardware Profiles
OK
Cancel
Apply

(6) The Device Manager window appears.



Click "Ports (COM & LPT)" to see setting values such as COM numbers.
In the case of the screen above:

Communication port (COM1) :COM1 port for the personal computer by default
USB Serial Port (COM4) :COM4 Port for communication converter (the COM number of the device installed this time)

Note that this name is the same for both a USB-232C converter and USB-485 converter.

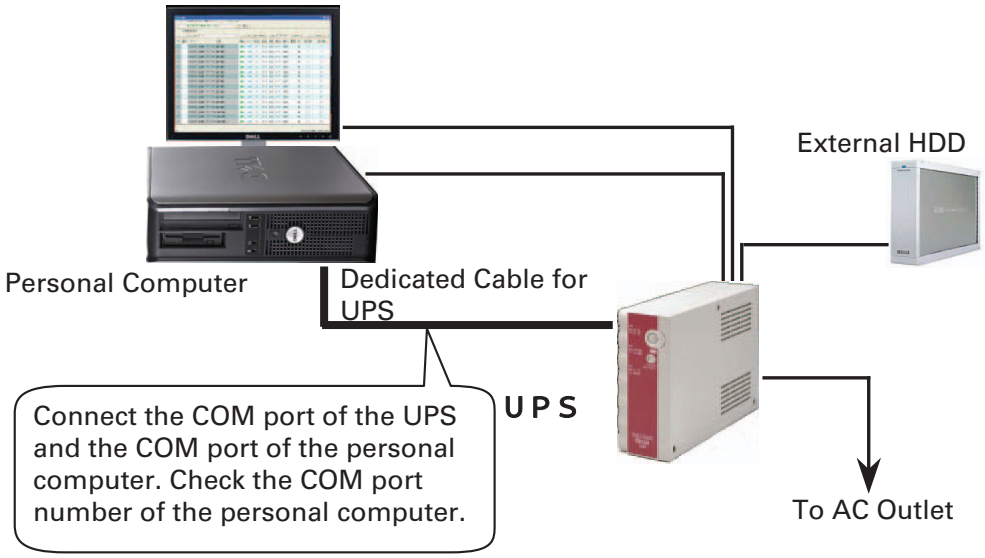
Note that the COM number down because it will be used for subsequent settings.

6-2. Uninterruptible power supply

6-2-1. Connecting uninterruptible power supply

The P-AIMS system uses a personal computer.Therefore, a power failure or the like will be a big problem.We recommend installing an uninterruptible power supply (UPS).
The UPS introduced here has a function for sending a shutdown signal to the personal computer in the event of a power failure and a function that always resets the power when there is a recovery from a power failure. You can set the stopping and automatic startup of the personal computer.

Connecting a UPS


External HDD
Personal Computer
Dedicated Cable for UPS
UPS
Connect the COM port of the UPS and the COM port of the personal computer. Check the COM port number of the personal computer.
To AC Outlet

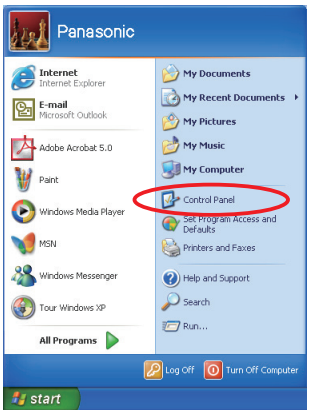
6-2-2. UPS power failure settings

When the power is turned off, the personal computer saves the current state and then shuts down.However, if there is a sudden power failure, the current state may not be able to be saved or the writing of data may not be possible, which may result in an error with the personal computer or a failure of the hard disk drive.Install a UPS as a countermeasure against a sudden power failure.If a power failure occurs, electric power is supplied from the UPS in order to maintain the power supply of the personal computer, and give the personal computer time to shut down normally.
Therefore, a UPS is an extremely effective device for a personal computer system.
The following describes the setting procedure for stopping and starting a personal computer using a UPS.

The applicable operating system is Windows XP Professional.
This setting is for shutting down a personal computer in the event of a power failure.

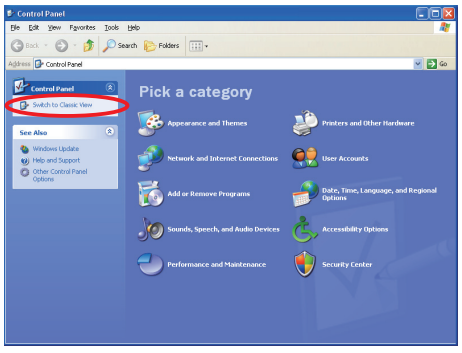
(1) Click start in the bottom left of the screen.

Click "Control Panel" in the menu that appears.



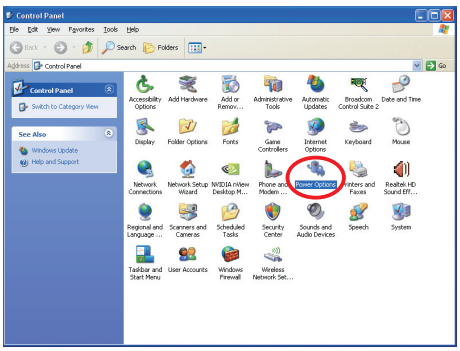
(2) The Control Panel window appears.

If the display is as shown in the figure on the right, click "Switch to Classic View" to change the display method.If the display is as shown in (3), it does not need to be clicked.



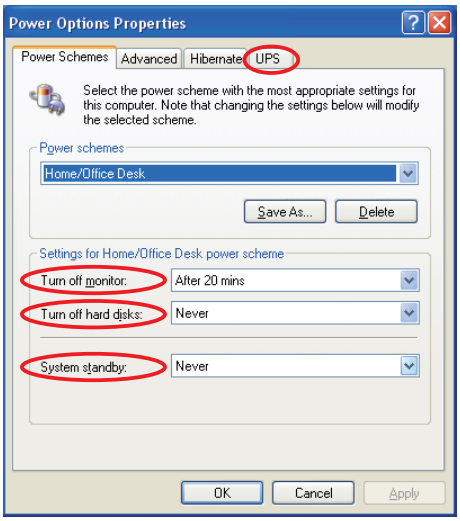
(3) The classic view type of the Control Panel appears.

Double-click "Power Options."

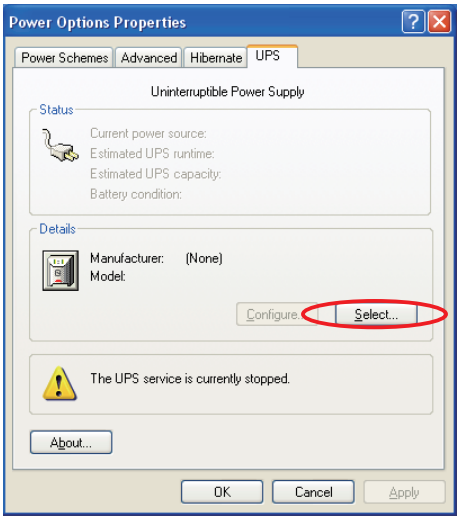


(4) The Power Options Properties dialog box appears.
[At the Same Time]
Set "Turn off monitor," "Turn off hard disks," "System standby," and "System hibernates" (this setting is not available on some personal computers) to "Never."

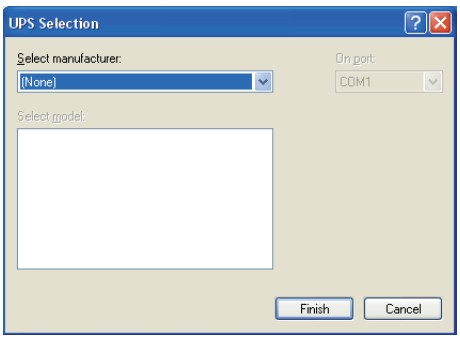
Click the UPS tab.



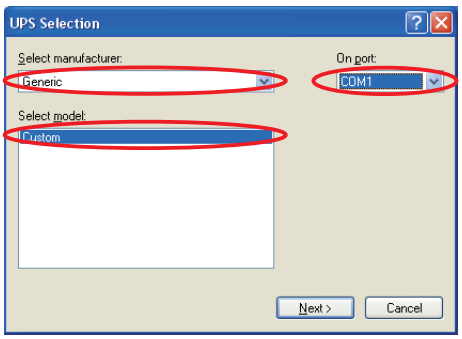
(5) Click Select... .



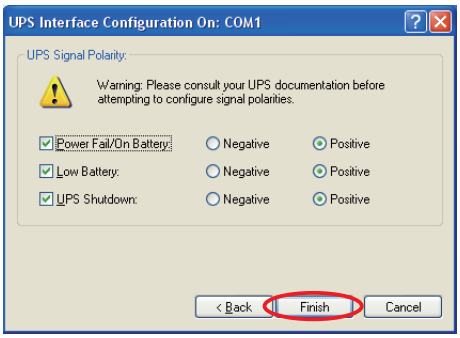
(6) The UPS Selection dialog box appears.



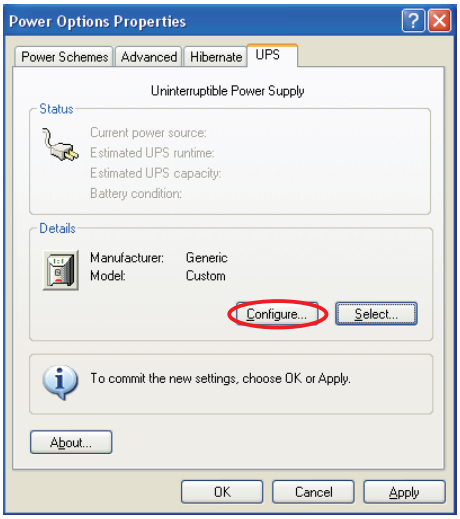
(7) Select the UPS.
Select "Generic" for "Select manufacturer," "Custom" for "Select model," and "COM1" for "On port," and then click Next > .



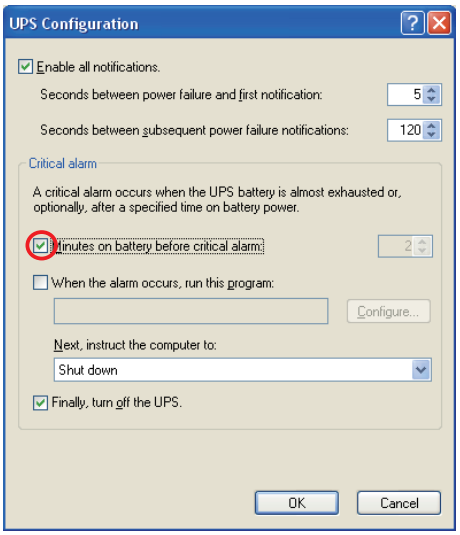
(8) The UPS Interface Configuration : COM1 dialog box appears.
Click Finish without changing any of the settings.



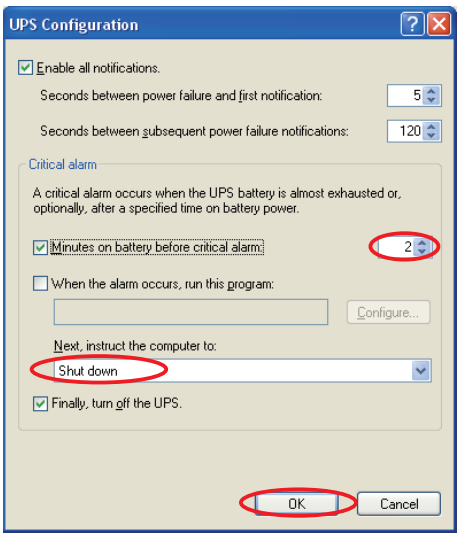
(9) The Power Options Properties dialog box reappears.
Click Configure... , which is now available.



(10) The UPS Configuration dialog box appears.
Click "Minutes on battery before critical alarm" to select the checkbox.

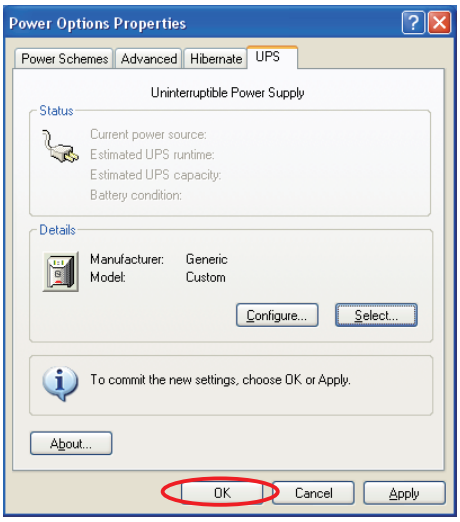

UPS Configuration
Enable all notifications.
Seconds between power failure and first notification:
5
Seconds between subsequent power failure notifications:
120
Critical alarm
A critical alarm occurs when the UPS battery is almost exhausted or, optionally, after a specified time on battery power.
Minutes on battery before critical alarm:
2
When the alarm occurs, run this program:
Configure...
Next, instruct the computer to:
Shut down
Finally, turn off the UPS.
OK
Cancel

(11) Check that the time until shutdown, which could not be selected until now, is 2 minutes, and "Next, instruct the computer to" is set to "Shut down."
If there is no problem, click [OK] .


UPS Configuration
Enable all notifications.
Seconds between power failure and first notification:
5
Seconds between subsequent power failure notifications:
120
Critical alarm
A critical alarm occurs when the UPS battery is almost exhausted or, optionally, after a specified time on battery power.
Minutes on battery before critical alarm:
2
When the alarm occurs, run this program:
Configure...
Next, instruct the computer to:
Shut down
Finally, turn off the UPS.
OK
Cancel

(12) The Power Options Properties dialog box reappears.
Click [OK] .
Confirm the UPS connection to complete the procedure.
Close the Control Panel window.

Note :Before clicking [OK] , make sure again that the cable connecting the PC and UPS is a dedicated cable, and that it is connected properly.If the wrong cable is connected or the cable is not connected properly, the PC may shut down unexpectedly.

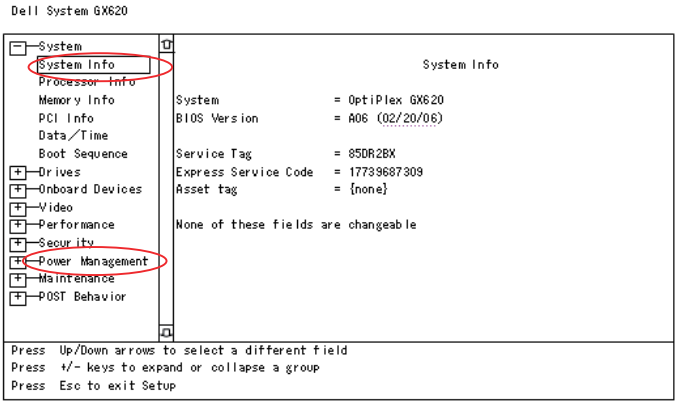


6-2-3. Recovery method settings of personal computer

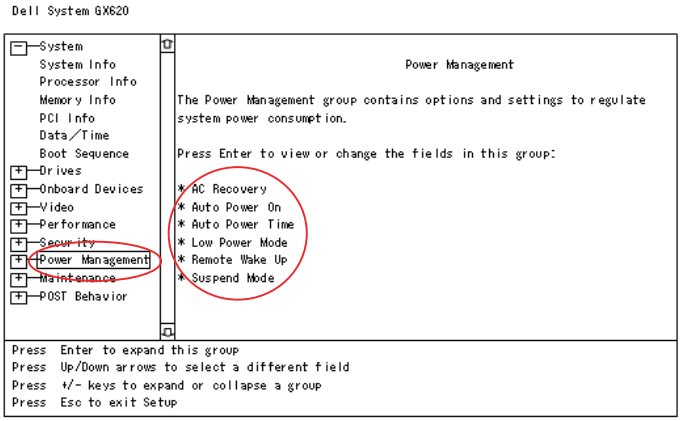
This method is the setting of the BIOS (Basic Input Output System) of the personal computer to enable recovery from a power failure.With this method, if you remove the power plug of the personal computer from the outlet and then reinsert it into the outlet, the personal computer will start automatically.In cases in which the personal computer being on will be a problem after you configure this setting, do not insert the power plug of the personal computer until you need to start the personal computer.
For reference, we will describe the BIOS recovery setting procedure on a DELL (OPTIPLEX GX620) personal computer.When configuring this setting on a model other than this, contact the manufacturer if you are unsure of what to do.

6-2-3-1. [Recovery setting] (Dell OPTIPLEX GX620)

(1) Turn on the power of the personal computer, and press the [F2]key several times when the maker's logo appears.If the timing for pressing the [F2] key is late, the Dell System GX620 screen is not displayed.If it is not displayed, turn the power off and then on again, and change the interval with which you press the [F2] key. The Dell System GX620 screen appears.

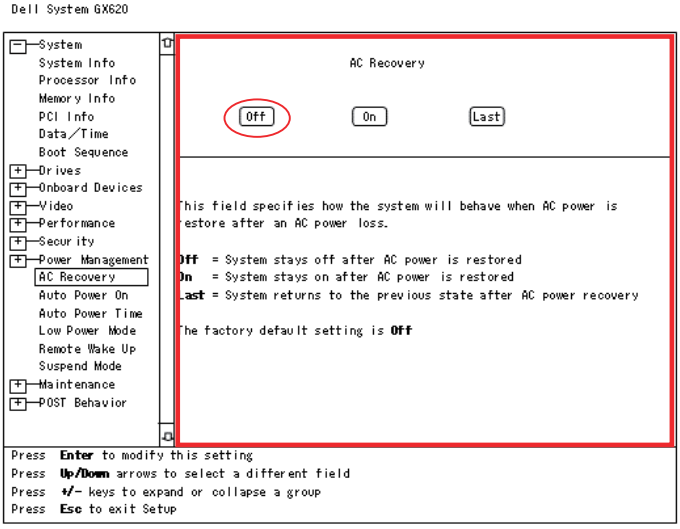


(2) Press the ↓ key to change the menu from "System Info" to "Power Management."
Press the → key to add the items with the [*] mark on the right to the menu on the left side.



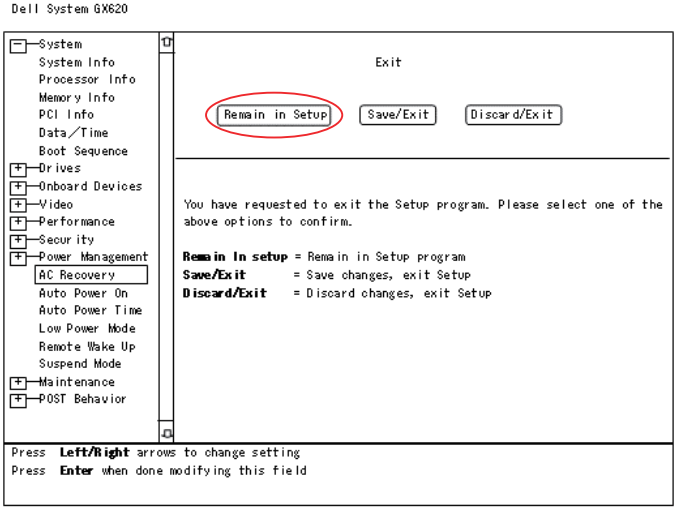
(3) Press the ↓ key to change the menu from "Power Management" to "AC Recovery."
Press the [Enter] key to move the focus from the menu side to inside the red frame in the figure on the right.
When the focus is moved, [Off] of AC Recovery is in a highlighted state.
Pressing the → key changes the item in the order of [Off], [On], and [Last].
Select [On].

Press the [Esc] key twice.



(4) Pressing the → key changes the item in the order of [Remain in Setup], [Save/Exit], and [Discard/Exit]. Select [Save/Exit].
Press the [Enter] key to save the changes to the BIOS, and start the operating system.

To check if the settings are configured properly, turn the power of the personal computer off, remove the power plug from the outlet, wait a while, and then insert the power plug into the outlet.If the personal computer starts automatically, the settings are configured properly.



6-3. Operation test of UPS and personal computer

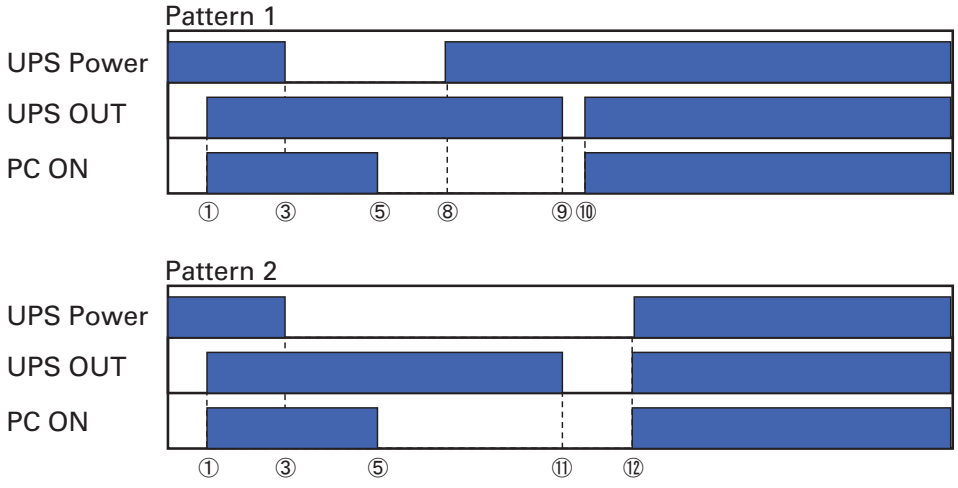
When you finish configuring the UPS settings and BIOS settings, conduct a test to check whether operation is performed properly.However, before you perform a test, turn on the UPS for a whole day to charge the battery in order to ensure the battery of the UPS has a sufficient amount of charge.
The following is the test result for a UPS made by Sanken Electric Co., Ltd.

Preparation

(1) Shut down the personal computer.
(2) Press the power button of the UPS to turn off the UPS.
(3) Check the connections of the RS-232C dedicated cable between the UPS and personal computer.
(4) Connect the personal computer, display, and external HDD so that they are supplied power from the UPS.
(5) Connect the power plug of the UPS to an outlet.

Test

(1) Press the power button of the UPS to turn on the UPS.
A buzzer sounds and the output power supply of the UPS turns on, and the personal computer starts up.
(2) Wait until the startup of the P-AIMS system is complete.(There is no need to wait if the P-AIMS system is not installed.)
(3) Remove the power plug of the UPS from the outlet.A buzzer sounds on the UPS, so press the BUZZ OFF button to stop the buzzer.
(4) After approximately 1 minute 45 seconds, the buzzer sounds again on the UPS, so press the BUZZ OFF button to stop the buzzer.
(5) After approximately 2 minute 10 seconds, the personal computer performs the shutdown operation and the buzzer sounds on the UPS, so press the BUZZ OFF button to stop the buzzer.
(6) After approximately 2 minutes 30 seconds, the personal computer shuts down. However, the output power supply of the UPS still remains on at that time.
(7) There are two patterns for the subsequent operation. The following describes pattern 1.
(8) After 1 minute has elapsed since (6) (3 minutes 30 seconds since the start of the test), insert the power plug of the UPS in the outlet.
(9) After approximately 2 minutes, the output power supply of the UPS turns off, and the lamp on the front panel flashes in order for a UPS check to be performed.
(10) After 10 seconds, the output power supply of the UPS turns on, and the power of the personal computer is recovered.
(11) Pattern 2
(12) If the power plug of the UPS remains disconnected, the output power supply of the UPS turns off after approximately 5 minutes 30 seconds has elapsed since (1).
(13) Insert the power plug of the UPS after the power turns off. The output power supply of the UPS turns on and the personal computer starts.



The UPS test is now finished.The pattern indicated with (12) is assumed to be the most likely to occur in the event of an actual power failure.

7. License Certification

Before you can use the P-AIMS system, you need to first perform a work procedure called "license certification."

To perform license certification, make an inquiry by sending the inquiry key to the inquiry e-mail address below. You will be registered as a user and issued a release key, and then receive a reply.

<Contact Information>
Product ID Issuance Desk
E-mail address: cmc_productid_desk@gg.jp.panasonic.com

When you make an inquiry, send the following information together with the inquiry in order to be registered as a user and issued a release key.

(1) Product name
(2) Company name/contact person
(3) Phone number
(4) E-mail address
(5) Inquiry key

* If you do not input a release key, you will no longer be able to use the system after 30 days elapses. Obtain a release key and perform license certification as soon as possible.
* Make an inquiry as soon as possible because it may sometimes take several days to be issued a release key.

License Certification Procedure

The procedure from after the P-AIMS system is installed up until the end of license certification is described below.

(1) Check the inquiry key from the License Certification screen.

(2) Send the inquiry key to the Issuance Desk (cmc_productid_desk@gg.jp.panasonic.com). Also notify us of the product name, company name/contact person, phone number, and e-mail address.

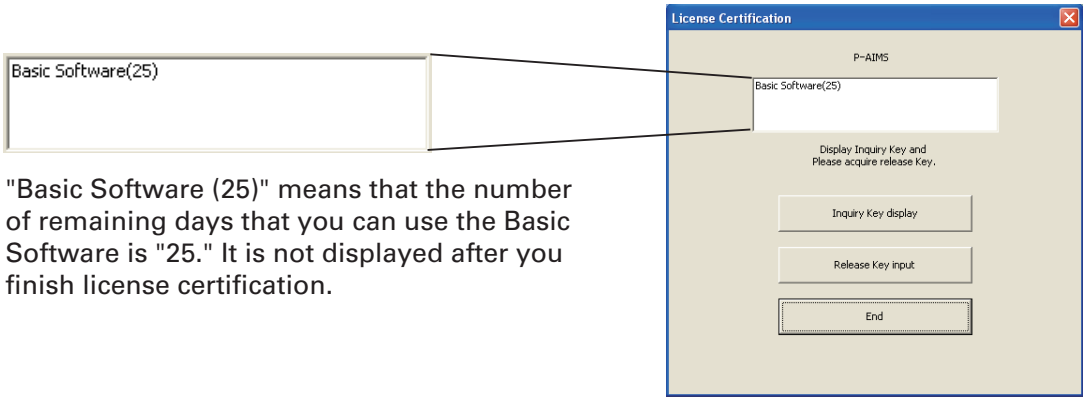
(3) A release key is issued.
You are registered as a user and a release key is issued. A reply is sent to the registered mail address.

(4) Input the release key from the License Certification screen.

(5) The license certification procedure is finished.

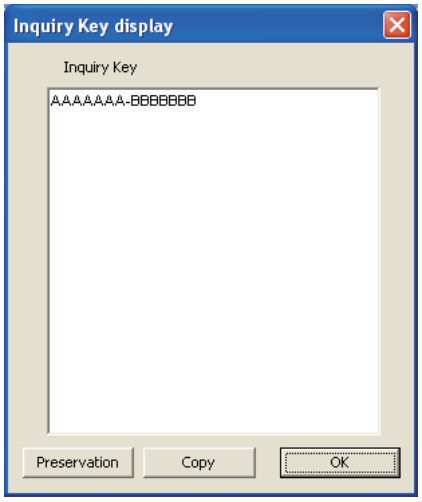
Performing License Certification

(1) A License Certification screen such as the following appears when you start a P-AIMS systems for which license certification is not finished.



"Basic Software (25)" means that the number of remaining days that you can use the Basic Software is "25." It is not displayed after you finish license certification.

* After you start a P-AIMS system for which license certification is not finished, the License Certification screen will appear at 9:00 a.m. and 3.p.m. This screen is not displayed after you finish license certification.
If you install optional software, the License Certification screen will appear until license certification is finished for all of the software.



(2) If you click the Inquiry Key display button in the License Certification screen, the Inquiry Key display screen appears, and the inquiry key is displayed in the screen.
Send the key displayed in this screen to the Issuance Desk (cmc_productid_desk@gg.jp.panasonic.com) by e-mail. At the same time, also notify us of the following items.

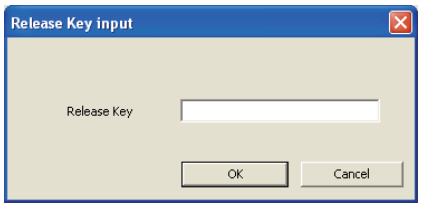
(1) Product name (required)
(2) Company name/contact person
(3) Phone number
(4) E-mail address (required)

You will be registered as a user and issued a release key.

Preservation :Clicking this button saves the inquiry key as a text file. Follow the instructions on the screen to save the text file. Enter the product name, company name/contact person, phone number, and e-mail address in this saved text file, and send the text file to the Issuance Desk by e-mail.

Copy :Clicking this button copies the inquiry key to the Windows clipboard. Paste the inquiry key into your mail.

OK :Clicking this button closes the Inquiry Key display screen.



(3) When you receive the release key, restart the P-AIMS system. See "2. Startup and shutdown" for how to restart the P-AIMS system, and then restart the system.

If license certification is not finished for the P-AIMS system, the License Certification screen on the right appears before the P-AIMS system restarts. Click the Release Key input button to display the Release Key input screen, and enter the release key.

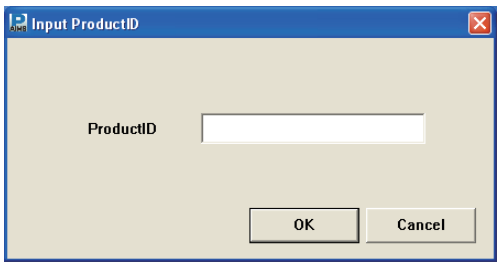
* If you install multiple P-AIMS system software, the same number of license certifications is required. In such a case, the number of release keys sent will be the same as the number of inquiry keys.
Enter all of the received release keys sequentially, and perform license certification. (There is no set order for entering release keys, so they can be entered in any order.)

License certification is finished once all of the release keys have been entered.
Click the End button. The License Certification screen closes, and the P-AIMS system starts.

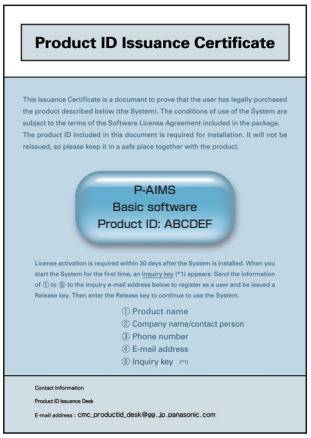
* The P-AIMS system will start even if you click the End button without entering the release key. You can use the system as is until license certification is finished. (The system can be used for a period of 30 days.)

8. P-AIMS System Installation

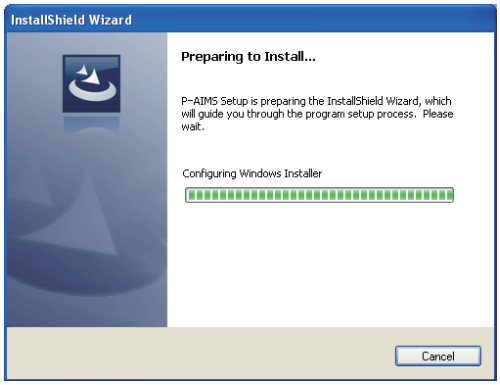
8-1. Installing Basic Software of P-AIMS system



(1) Insert the Basic Software CZ-CSWKC2 CD of the P-AIMS system you purchased into the CD-ROM drive. Installation starts automatically when you insert the CD. If installation does not start, double-click “Setup.exe“ on the CD-ROM drive to start it.
Enter the Product ID in the Input Product ID screen that appears.
For the Product ID, see the “Product ID Issuance Certificate“ supplied with the software.



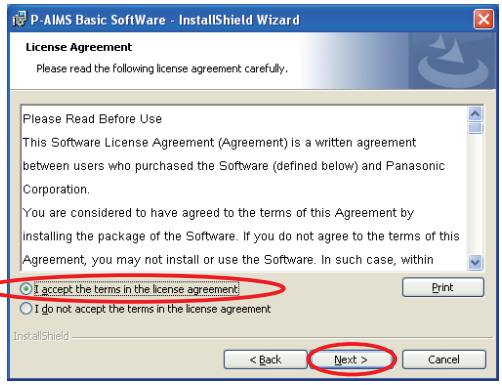
* Keep the “Product ID Issuance Certificate“ in a safe place. The Product ID is required to install the P-AIMS system. The “Product ID Issuance Certificate“ will not be reissued.


InstallShield Wizard
Preparing to Install...
P-AIMS Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait.
Configuring Windows Installer
Cancel

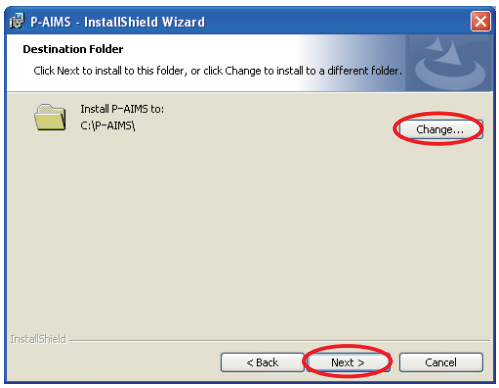
(2) The InstallShield(R) Wizard prepares to install the P-AIMS system.

P-AIMS - InstallShield Wizard
Welcome to the InstallShield Wizard for P-AIMS
The InstallShield(R) Wizard will install P-AIMS on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

(3) After a short while, the "The InstallShield(R) Wizard will install P-AIMS on your computer. To continue, click Next. " message appears. Click the Next > button.

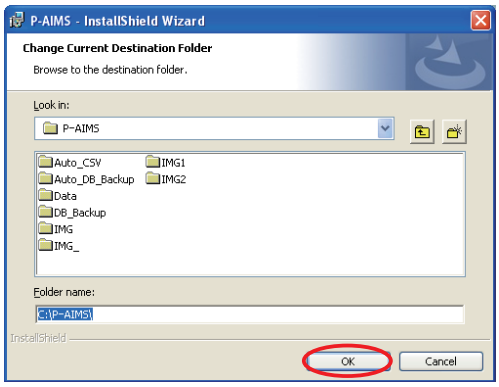

P-AIMS Basic SoftWare - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
Please Read Before Use
This Software License Agreement (Agreement) is a written agreement between users who purchased the Software (defined below) and Panasonic Corporation.
You are considered to have agreed to the terms of this Agreement by installing the package of the Software. If you do not agree to the terms of this Agreement, you may not install or use the Software. In such case, within
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

(4) Next, the License Agreement screen appears. Carefully read the license agreement, and click "I accept the terms in the license agreement" if you agree to the terms of the license agreement. The Next > button becomes active. Click the Next > button. (The software cannot be installed if you do not agree to the terms of the license agreement.)

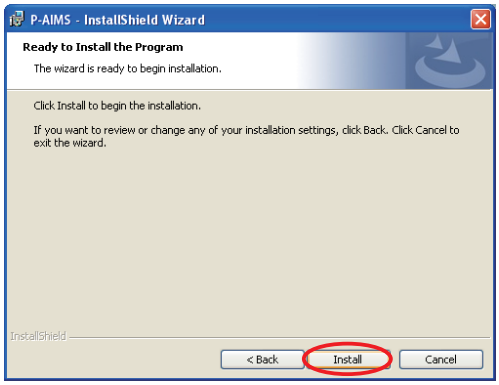


(5) A screen for changing the folder to install the P-AIMS system in appears.

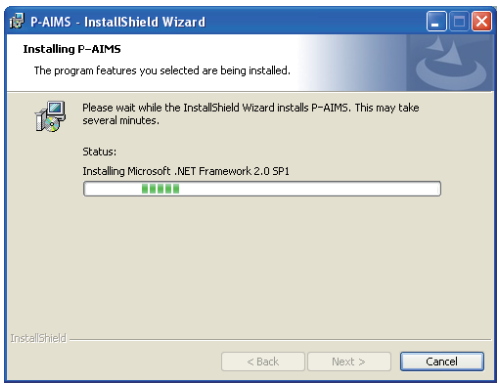
- If you want to change the folder, click the Change... button. A screen for selecting the installation folder appears.
- If you do not want to change the folder, click the Next > button.



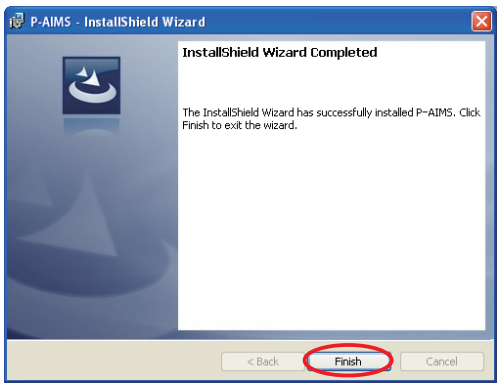
To change the folder, specify a folder and click the OK button. The specified folder is displayed and the previous screen is redisplayed.


P-AIMS - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

(6) Click the Install button to begin the installation of the P-AIMS system.

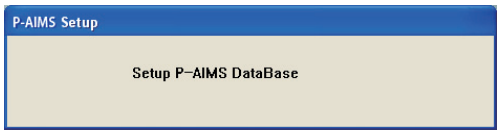

P-AIMS - InstallShield Wizard
Installing P-AIMS
The program features you selected are being installed.
Please wait while the InstallShield Wizard installs P-AIMS. This may take several minutes.
Status:
Installing Microsoft .NET Framework 2.0 SP1
InstallShield
< Back
Next >
Cancel

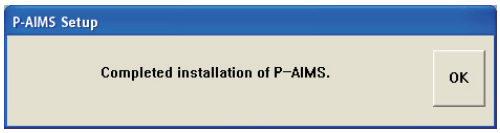
Please wait a while.


P-AIMS - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed P-AIMS. Click Finish to exit the wizard.
< Back
Finish
Cancel

(7) When the P-AIMS system setup is finished, the installation complete screen appears. If you click the Finish button, the initial settings of the P-AIMS system are configured.

(8) When the initial settings are finished, click the OK button in the "Completed installation of P-AIMS" screen that appears.
The installation is now finished.





(9) When the installation is finished, registration of the P-AIMS shortcut to the desktop and registration to the Start menu take place.

(10) From now on, you can start the P-AIMS system by double-clicking this shortcut.

8-2. Displaying Help files

From the menu bar, click Help menu - Basic software manual to display the instruction manual for the P-AIMS system.Since the Help files of the P-AIMS system are pdf files, you need Adobe Reader to read them.
Install Adobe Reader to view the Help files. Adobe Reader is a trademark of Adobe Systems Incorporated. Use Adobe Reader in accordance with the instructions provided by Adobe Systems Incorporated.
* Download Adobe Reader from the Adobe (http://www.adobe.com) site, and then install it.

9. Optional Software Installation

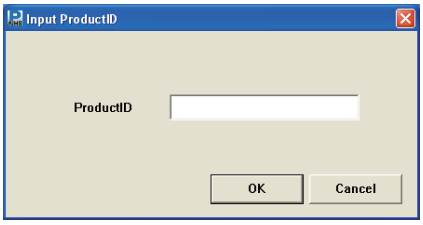
The following shows the optional software of the P-AIMS system.
Distribution Ratio Software Symbol A
Layout Display Software Symbol G
BACnet Control Software Symbol B
Web Software Symbol W

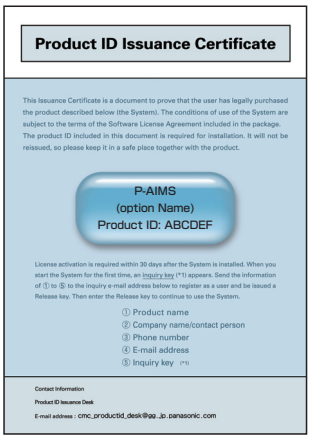
9-1. Installing optional software

The installation procedures for all optional software are the same.The following explanation describes the procedure for installing Distribution Ratio Software.Installation is the same for all other optional software, so use the same procedure to install other optional software.

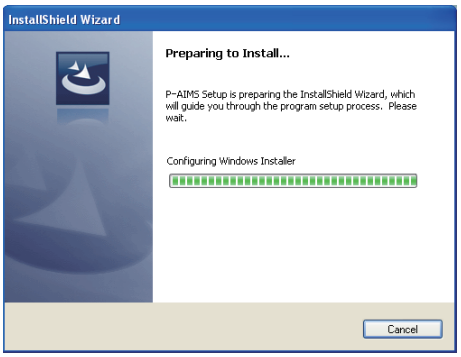
9-1-1. Installing Distribution Ratio Software

(1) First, stop the P-AIMS system.
Insert the Distribution Ratio Software CZ-CSWAC2 CD of the air-conditioning integrated system (P-AIMS system) you purchased into the CD-ROM drive.
Installation starts automatically when you insert the CD.
If installation does not start, double-click “Setup.exe“ on the CD-ROM drive to start it.
Enter the Product ID in the Input Product ID screen that appears.
For the Product ID, see the "Product ID Issuance Certificate" supplied with the software.





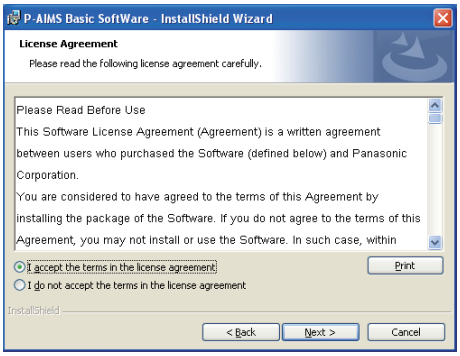
(2) The InstallShield Wizard prepares to install the P-AIMS system.


InstallShield Wizard
Preparing to Install...
P-AIMS Setup is preparing the InstallShield Wizard, which will guide you through the program setup process. Please wait.
Configuring Windows Installer
Cancel

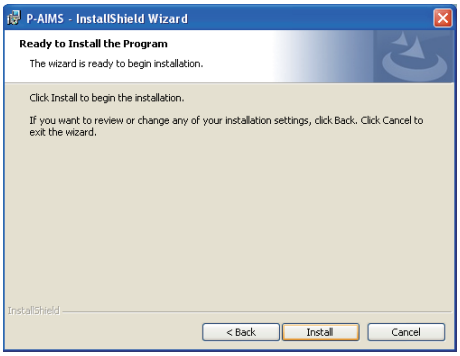
(3) After a short while, the message "The InstallShield(R) Wizard will install P-AIMS Distribution Ratio Option on your computer. To continue, click Next.” appears. Click the [Next] button.

P-AIMS - InstallShield Wizard
Welcome to the InstallShield Wizard for P-AIMS
The InstallShield(R) Wizard will install P-AIMS on your computer. To continue, click Next.
WARNING: This program is protected by copyright law and international treaties.
< Back
Next >
Cancel

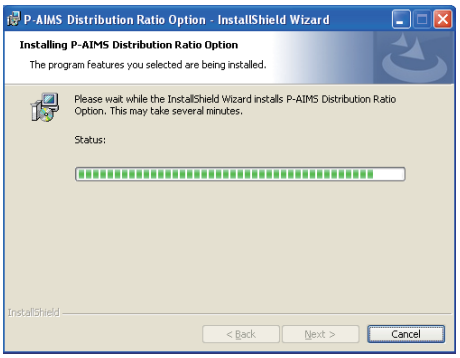
(4) Next, the License Agreement screen appears.Carefully read the license agreement, and click "I accept the terms in the license agreement" if you agree to the terms of the license agreement.The [Next] button becomes active.Click the [Next] button.(The software cannot be installed if you do not agree to the terms of the license agreement.)


P-AIMS Basic SoftWare - InstallShield Wizard
License Agreement
Please read the following license agreement carefully.
Please Read Before Use
This Software License Agreement (Agreement) is a written agreement between users who purchased the Software (defined below) and Panasonic Corporation.
You are considered to have agreed to the terms of this Agreement by installing the package of the Software. If you do not agree to the terms of this Agreement, you may not install or use the Software. In such case, within
I accept the terms in the license agreement
I do not accept the terms in the license agreement
Print
InstallShield
< Back
Next >
Cancel

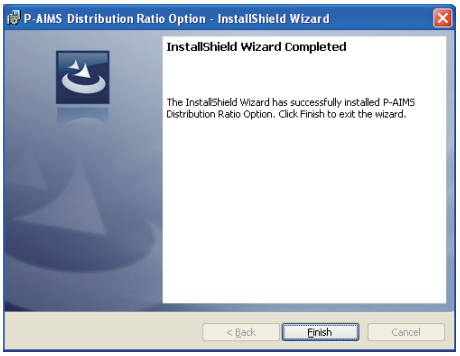
(5) The message “The wizard is ready to begin installation. Click Install to begin the installation.” appears. Click the [Install] button.


P-AIMS - InstallShield Wizard
Ready to Install the Program
The wizard is ready to begin installation.
Click Install to begin the installation.
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.
InstallShield
< Back
Install
Cancel

(6) The installation of the P-AIMS system begins. Please wait a while.


P-AIMS Distribution Ratio Option - InstallShield Wizard
Installing P-AIMS Distribution Ratio Option
The program features you selected are being installed.
Please wait while the InstallShield Wizard installs P-AIMS Distribution Ratio Option. This may take several minutes.
Status:
InstallShield
< Back
Next >
Cancel

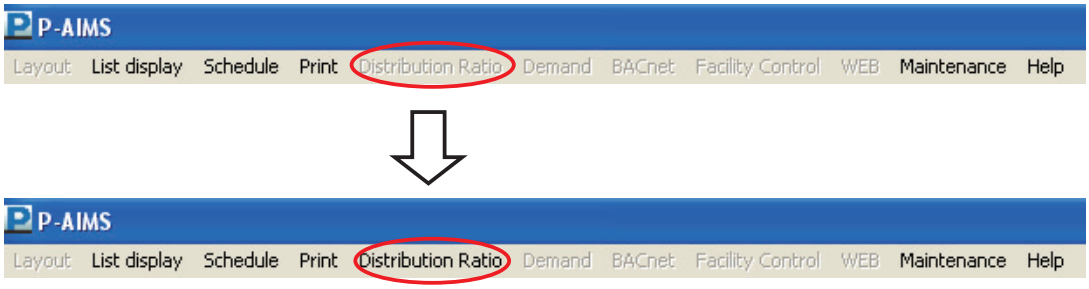
(7) When the P-AIMS system setup is finished, the installation complete screen appears.
Click the [Finish] button to complete the installation.


P-AIMS Distribution Ratio Option - InstallShield Wizard
InstallShield Wizard Completed
The InstallShield Wizard has successfully installed P-AIMS Distribution Ratio Option. Click Finish to exit the wizard.
< Back
Finish
Cancel

* When installing the Distribution Ratio software, it is possible to install this system without stopping the P-AIMS system, but the functions of the Distribution Ratio software will not be added. Restart the P-AIMS system.

9-1-2. Menus when restarted after installing Distribution Ratio Software

After the system restarts, the fee calculation functions are enabled and the menu item Distribution ratio is selectable.

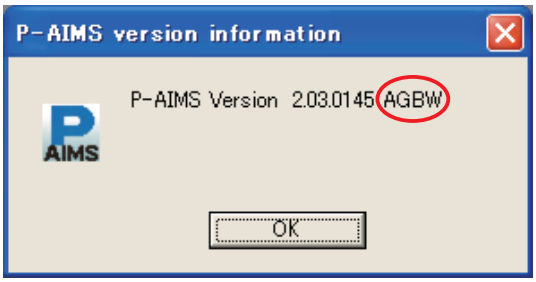

P-AIMS
Layout List display Schedule Print Distribution Ratio Demand BACnet Facility Control WEB Maintenance Help
P-AIMS
Layout List display Schedule Print Distribution Ratio Demand BACnet Facility Control WEB Maintenance Help

In the same way, if other optional software is installed, the installed optional functions are selectable.If all optional software is installed, the display is as follows.

9-2. Checking installation status of options

From the menu bar, click Help - Version information to display the version information screen shown in the figure on the right.
The symbols in the figure on the right indicate the installed options.The following shows the meanings of the symbols.

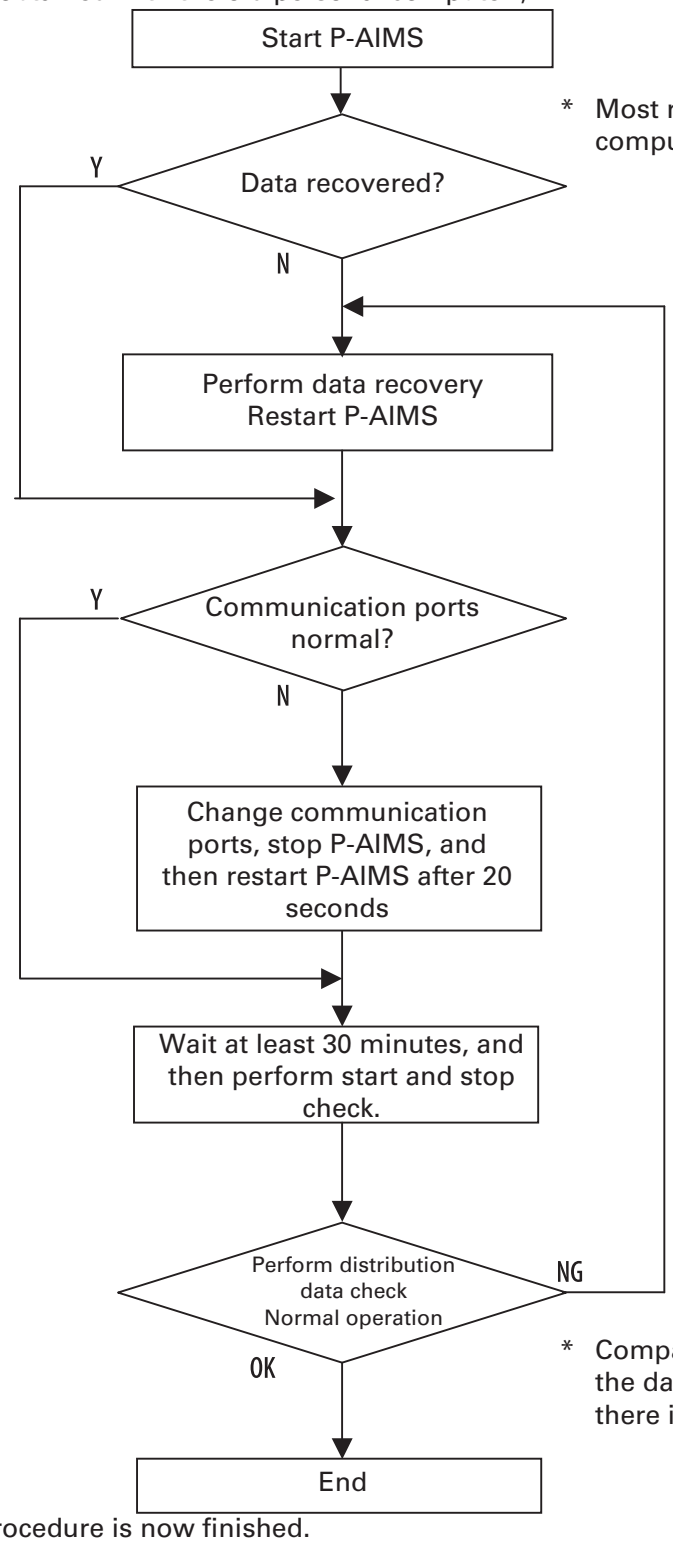
A : Distribution Ratio Software
G : Layout Display Software
B : BACnet Control Software
W : Web Software



Therefore, if only A is displayed, only the Distribution Ratio software is installed.The same applies for the other options.The screen in the figure on the right is when all of the optional software is installed.

10. Procedure for Replacing Personal Computer

This section describes the procedure for migrating a P-AIMS system running on an old personal computer to a new personal computer.
This explanation is for a new personal computer with an environment capable of running the P-AIMS system (all of the adapters, external HDD, UPS, and other devices are installed and the P-AIMS system including optional software is installed).Also, copy a backup of the latest files of the old personal computer to the new personal computer so that they can be read whenever necessary.
(This method enables the data obtained using the new personal computer to be the same as when obtained with the old personal computer.)



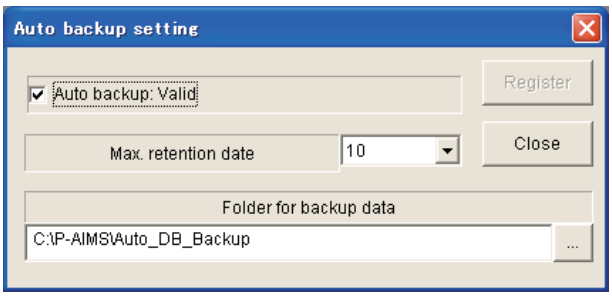
* Most recent backup data of old personal computer

* Compare the data of the previous day and the data of the current day, and check that there is no big difference.

The procedure is now finished.

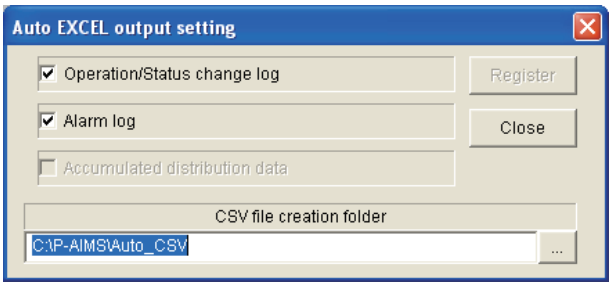
Finally, set the following.

(1) Automatic backup file save destination
The initial setting for the save destination of the STAIM system backup files is the installation folder as shown in the figure on the right.If this setting is left as is, there will be nothing you can do if the hard disk of the personal computer crashes, so set the backup files to be saved to the external hard disk you added.



(2) Automatic Excel file output destination
The automatic Excel file output destination is not set as shown in the figure on the right.Specify a save destination.For the save destination, set the automatic Excel files to be saved to the external hard disk you added.

* The CSV files for Excel also include files for calculating distribution ratios. The figure above is for when only Basic Software is installed.



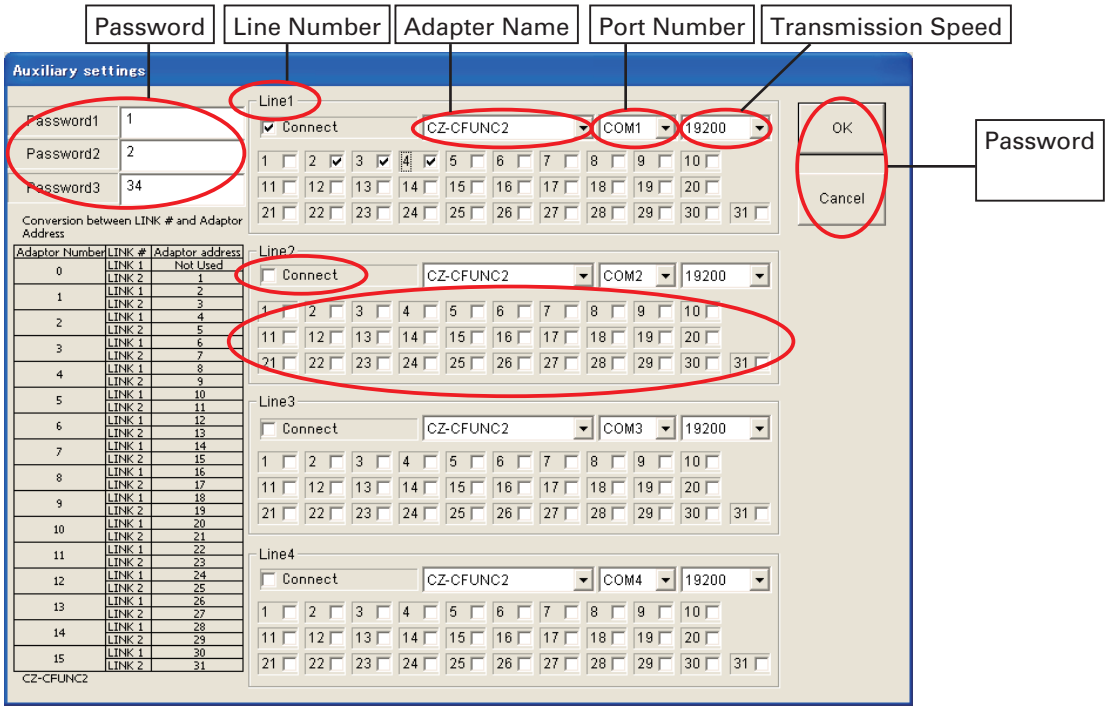
11. Master Registration and Special Operating Procedures of Basic Software

This section describes master registration and special operating procedures that are not included in the operation manual for the Basic Software.

11-1. Auxiliary settings

[Procedure]
On the menu bar, select Maintenance - Auxiliary settings.
<Password: Level 3>

Configure the password settings, RS-485 settings for the communication lines, and adapter settings.



11-1-1. Editing passwords

11-1-1-1. Registering passwords

To prevent the settings of important items from being edited easily, a password screen is displayed when a menu is selected. When you enter the password, the functions corresponding to the level of that menu can be performed.
This section describes the password of each level.

Level 1 :Enables the operation and changing of the names of devices protected by the password.
Level 2 :Enables operations such as system settings and shutdown.
Level 3 :Enables all operations including system maintenance.

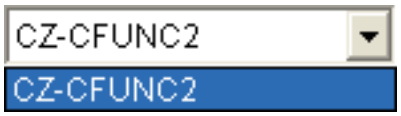
The initial values are "1" for Level 1, "2" for Level 2, and "3" for Level 3.
The restrictions are also cancelled if a password for a level higher than the one displayed in the password input screen is entered.

11-1-2. Line settings

11-1-2-1. Setting connections

Click to select the Connect checkbox of the line you want to connect.Lines with a check mark are enabled.Click to select the checkbox, and click again to clear the checkbox.)

11-1-2-2. Setting adapter names



Select the adapter name to use with this line.Clicking the adapter name item displays a pull-down list like the one shown in the figure on the left.

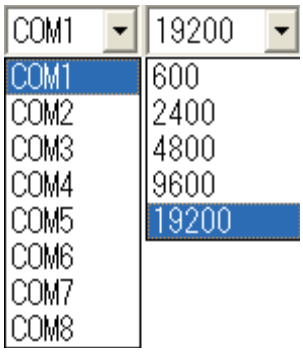
11-1-2-3. Setting adapter numbers

Click to select the Adapter Number checkbox of the adapter you want to connect.Adapter numbers with a check mark are enabled.(Click to select the checkbox, and click again to clear the checkbox.)

* The following describes the relation between the communication adapter numbers and links 1 and 2, and the adapter numbers of P-AIMS.
  (Adapter number of P-AIMS) = (communication adapter number) x 2 + (link number) - 1
  Where the communication adapter number is set to "0," the adapter number of P-AIMS is "0" for link 1 and "1" for link 2.Therefore, link 1 which has the adapter number of P-AIMS "0" cannot be used.
* When using a communication adapter (CZ-10APB3) to use an accumulated value, only use an even number for the adapter number (adapter number of P-AIMS corresponding to link 1).
  where the communication adapter number is set to "0" when obtaining an accumulated value, the value cannot be obtained because the adapter number of link 1 cannot be used.In such a case, use a communication adapter number from "1."(The adapter number of P-AIMS becomes "2.")
* Even if there are absolutely no indoor or outdoor units connected to link 1 of the communication adapter (CZ-10APB3) for obtaining the accumulated value, make sure you select the checkbox for the adapter number of P-AIMS corresponding to link 1 of the communication adapter (CZ-10APB3).If the checkbox is not selected, P-AIMS will be unable to obtain an accumulated value.

11-1-2-4. Setting communication parameters

Use RS-485 (for communication adapter) for communication between the personal computer and adapter.For the communication parameters, set the communication port number of the personal computer and the transmission speed (baud rate).

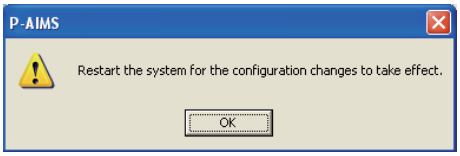


* Select 9600 bps for the transmission speed. However, when using a communication adapter (CZ-10APB3), you can also use 19200 bps.
* Even is set for the parity, and 8 bit for the data length. (These values cannot be changed.)

11-1-2-5. Saving settings

The two buttons in the top right of the screen are a button that is initially disabled and the Close button.Clicking the Close button closes the screen.
If the auxiliary setting items are changed, the disabled button and the Close button change to the OK and Cancel buttons.
Clicking the Cancel button returns to the state before the settings were made, and the buttons change to a disabled button and the Close button.

Clicking the OK button displays the next message, and you are asked whether to continue with the registration.
Clicking the Yes button registers the settings, and the buttons change to a disabled button and the [Close] button.

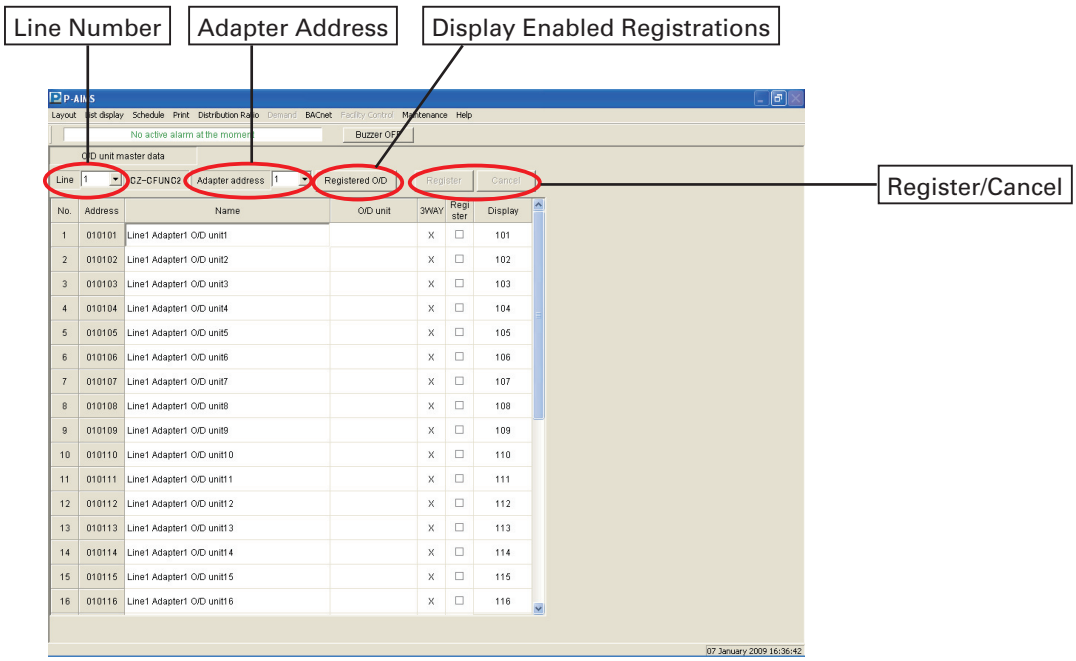


* If a communication line is changed, the settings will not be enabled unless P-AIMS is restarted.When you perform a restart, leave at least 20 seconds after stopping P-AIMS before restarting it.

11-2. Outdoor unit master

[Procedure]
On the menu bar, select Maintenance - O/D unit master data settings.
<Password: Level 3>

Configure the settings of each outdoor unit.



:Specify the line number.

:Specify the adapter address.

:Displays only items with a check mark in the Registered column.

:Registers the changes.

:Returns to the state before the changes.

Explanation of column titles

Address	:Indicates the address of the outdoor unit.
Name	:Indicates the name of the outdoor unit.
Outdoor Unit	:Indicates the outdoor unit code.
3WAY	:Indicates the outdoor unit is 3WAY.
Register	:Enables registration.
Display Order	:Specify the display order.

11-2-1. Display method

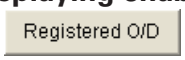
11-2-1-1. Specifying line

Selecting a line number from the Line combo box displays only the selected line. Clicking on the right of the combo box displays a drop-down list containing "1, 2, 3, and 4."

11-2-1-2. Specifying address

Selecting an address from the Adapter Address combo box displays only the indoor unit of the selected address.Clicking on the right of the combo box displays a drop-down list containing "1 to 31."

11-2-1-3. Displaying enabled registrations

Clicking 

so that the button is pressed in like this

displays only outdoor units with a check mark in the Registered column.Clicking the button again returns the button to its original state and displays all of the outdoor units.

11-2-1-4. 3WAY indication

The P-AIMS system recognizes an outdoor unit, determines whether it is 2WAY or 3WAY, and then adds the "O" mark to the 3WAY column if the outdoor unit is 3WAY.

11-2-2. Change method for outdoor units

11-2-2-1. Changing outdoor unit names (outdoor units)

To change the name of the outdoor unit, double-click the Name column.It is possible to change part of the name of a previously registered outdoor unit.However, to change the entire name, just type in the name.The existing name will be deleted and only the new name will be displayed.

11-2-2-2. Registering and changing outdoor units

To change the outdoor unit, double-click the Outdoor Unit column.It is possible to change part of a previously registered outdoor code.However, if you want to change the entire outdoor unit code, just type in the information.The existing outdoor unit will be deleted and only the new outdoor unit will be displayed.

* Enter the outdoor unit code in the outdoor unit column.

11-2-2-3. Enabling/disabling registrations

To make a registration after changing the name and other information, click this registration frame, and select the checkbox.Selecting the checkbox enables the registration.Clicking the checkbox again clears the check mark and disables the registration.

11-2-2-4. Registering and changing display order

Enter the display order to use when displaying outdoor unit information and the like.In this system, "0" is handled as being at the bottom in the display order.The display order indication is 4 digits of only numbers.

11-2-2-5. Registering changed data

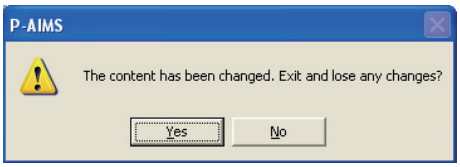
Click Register to register the changed data.All of the changed data is registered.

11-2-2-6. Canceling settings

Click Cancel to return to the previously registered state.

11-2-3. Confirming changes

If you change the information of the outdoor unit master and then attempt to switch to another screen without saving the changes, a change confirmation message appears.



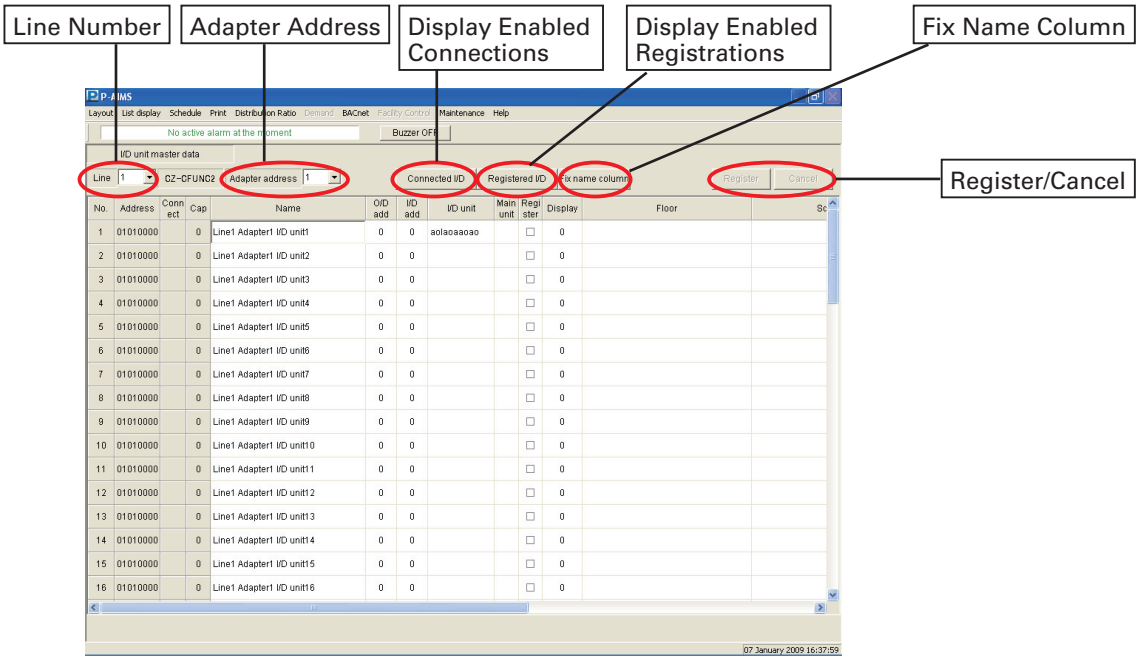
Click Yes to switch to the other screen without registering the changes.

Click No to repeat the operation of this screen.

11-3. Indoor unit master

[Procedure]
On the menu bar, select Maintenance - I/D unit master data settings.
<Password: Level 3>

Configure the settings of each indoor unit.



Line 1 :Specify the line number.

Adapter address 1 :Specify the adapter address.

Connected I/D :Displays only items with "Enable" in the Connection column.

Registered O/D :Displays only items with a check mark in the Registered column.

Fix name column :Sets the name column as a fixed frame.

Register :Registers the changes.

Cancel :Returns to the state before the changes.

Explanation of column titles

Address	: Indicates the address of the indoor unit.
Connection	: Indicates the indoor units connected to the P-AIMS system.
Capacity	: Indicates the capacity of the indoor unit.
Name	: Indicates the name of the indoor unit.
Outdoor Unit AD	: Indicates the outdoor unit (system) address.
Indoor AD	: Indicates the indoor unit address.
Indoor Unit	: Indicates the indoor unit code.
Main Unit	: Sets the main unit indication of the indoor unit.
Register	: Enables registration.
Display Order	: Specify the display order.
Floor	: Sets the floor name.
Schedule Group	: Sets the schedule group.
Control Group	: Sets the control group.

11-3-1. Display method

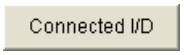
11-3-1-1. Specifying line

Selecting a line number from the Line combo box displays only the selected line. Clicking on the right of the combo box displays a drop-down list containing "1, 2, 3, and 4."

11-3-1-2. Specifying address

Selecting an address from the Adapter Address combo box displays only the indoor unit of the selected address.Clicking on the right of the combo box displays a drop-down list containing "1 to 31."

11-3-1-3. Displaying enabled connections

Clicking 

so that the button is pressed in like this

displays only indoor units indicated with "Enabled" in the Connection column.Clicking the button again returns the button to its original state and displays all of the indoor units.

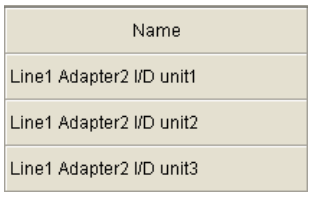
11-3-1-4. Displaying enabled registrations

Clicking

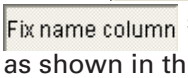
so that the button is pressed in like this

displays only indoor units with a check mark in the Registered column.Clicking the button again returns the button to its original state and displays all of the indoor units.

11-3-1-5. Fixing name column



Clicking

so that the button is pressed in like this 

sets the Name column as a fixed frame (becomes gray) as shown in the figure on the left.When the column becomes a fixed frame, it cannot be scrolled horizontally and edited.This is convenient when entering an item on the right of "Tennant," as you can make changes while checking the name.If you click the button again, it returns to its original state and the fixed frame disappears so that you can edit the names.

11-3-1-6. Address indication

This indicates the addresses of the indoor units.The address consists of 8 digits, and there are two digits for each of (line number) + (adapter address) + (outdoor unit address) + (indoor unit address).However, when the Connection column becomes "Enabled," the (outdoor unit address) + (indoor unit address) are confirmed.

11-3-1-7. Connection indication

"Enabled" is indicated for indoor units for which a connection has been confirmed.

11-3-2. Change method for indoor units

11-3-2-1. Changing indoor unit names

Double-click Indoor Unit column to change the name of the indoor unit.It is possible to change part of the name of a previously registered indoor unit.However, to change the entire name, just type in the name.The existing name will be deleted and only the new name will be displayed.

11-3-2-2. Changing outdoor unit AD

Move the cursor to the frame to edit, and enter the outdoor unit (system) address.Enter only numbers.The applicable address is the number of the outdoor unit registered to the same adapter (same link in the case of a communication adapter) that is registered on the outdoor unit.

11-3-2-3. Changing indoor unit AD

Move the cursor to the frame to edit, and enter the indoor unit address.Enter only numbers.

11-3-2-4. Registering and changing indoor units

To change an indoor unit, double-click the corresponding field.It is possible to change part of a previously registered indoor unit code.However, if you want to change the entire indoor unit code, just type in the information.The existing name will be deleted and only the new indoor unit will be displayed.

* Enter the indoor unit code in the indoor unit column.

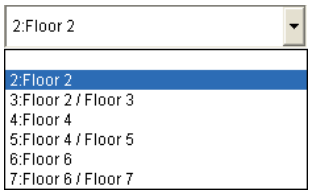
11-3-2-5. Enabling/disabling registrations

To make a registration after changing the name and other information, click this registration frame, and select the checkbox.Selecting the checkbox enables the registration.Clicking the checkbox again clears the check mark and disables the registration.

11-3-2-6. Registering and changing display order

Enter the display order to use when displaying status monitoring, operations, and the like.In this system, "0" is handled as being at the bottom in the display order.The display order indication is 4 digits of only numbers.

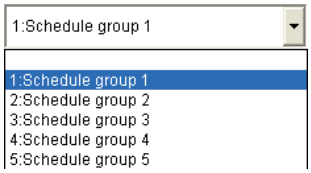
11-3-2-7. Specifying and changing floors



When segmenting indoor units by floor, specify the floor.Click the frame you want to specify in order to display ▼ and then click ▼ .Select a floor name from the names of registered floors displayed in the drop-down list.
To register a floor name, select Maintenance - Register floor name.

* It is convenient to register floor names in units of floors displayed on the screen.

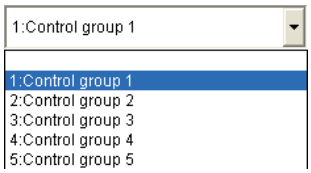
11-3-2-8. Specifying and registering schedule groups



When segmenting indoor units by schedule group, specify the schedule group.Click the frame you want to specify or change in order to display ▼ and then click ▼ .
Select a schedule group name from the names of registered schedule groups displayed in the drop-down list.To register a schedule group name, select Maintenance - Register schedule group name.

* Even if you register a schedule group name, it will not be possible to configure the schedule operation time settings (Schedule - Schedule operation time settings) unless the indoor units are assigned on the indoor unit master.

11-3-2-9. Specifying and changing control groups



When segmenting indoor units by control group, specify the control group.Click the frame you want to specify in order to display ▼ and then click ▼ .Select a control group name from the names of control groups displayed in the drop-down list.
To register a control group name, select Maintenance - Register control group name.

* It is convenient to register control group names by units of group for when a start and stop is performed.

[Convenient Tip on Use]
One convenient way of using the drop-down list is to enter a number displayed on the left of the list. This has the same effect as clicking the item with the mouse.Select a two-digit number as shown below.
"1" => Press [1] once, "10" => Press [1] twice, "11" => Press [1] three times..."19"=> Press [1] eleven times
"2" => Press [2] once, "20" => Press [2] twice, "21" => Press [2] three times..."29" => Press [2] eleven times
"3" => Press [3] once, "30" => Press [3] twice, "31" => Press [3] three times... "39" => Press [2] eleven times

11-3-2-10. Registering changed data

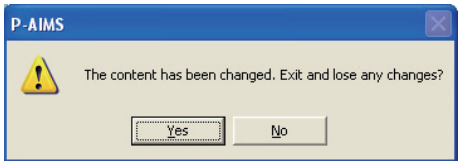
Click [Register] to register the changed data.All of the changed data is registered.

11-3-2-11. Canceling settings

Click [Cancel] to return to the previously registered state.

11-3-3. Confirming changes

If you change the information of the indoor unit master and then attempt to switch to another screen without saving the changes, a change confirmation message appears.

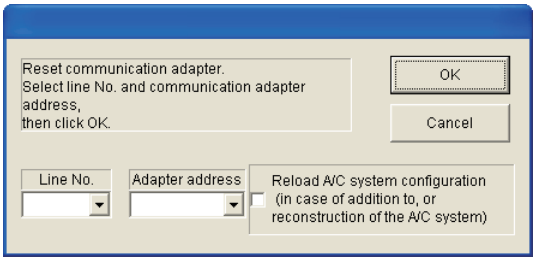


Click [Yes] to switch to the other screen without registering the changes.
Click [No] to repeat the operation of this screen.

11-4. Resetting adapters

[Procedure]
On the menu bar, select Maintenance - Reset adapter.
<Password: Level 3>

Perform a software reset of the adapter.This is the same as turning the power of the adapter off and on.Resetting the adapter results in the adapter information being re-obtained.
If the model setting information of indoor units has changed, you can perform the reset operation from this screen without operating the adapter on site directly.
If the checkbox for re-reading the air conditioning configuration is selected, a re-read instruction is output to the adapter.


Reset communication adapter.
Select line No. and communication adapter address,
then click OK.
OK
Cancel
Line No.
Adapter address
Reload A/C system configuration (in case of addition to, or reconstruction of the A/C system)

11-4-1. Reset method

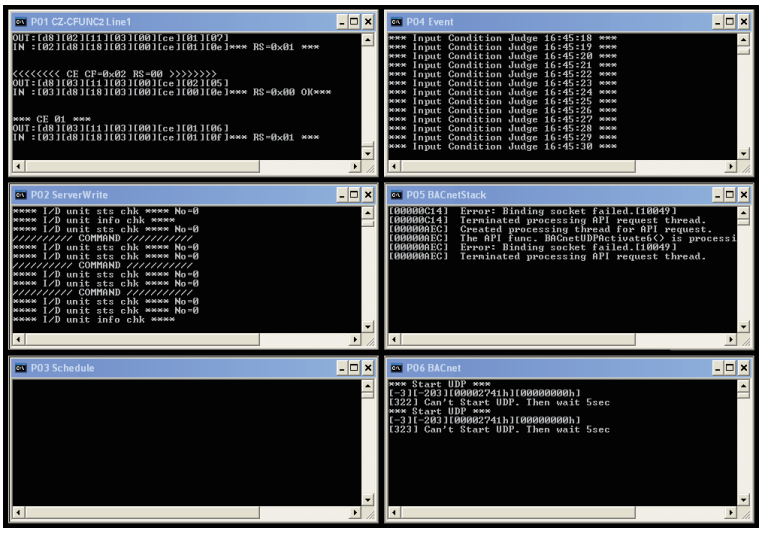
Click each ▼ to select the line number and adapter address for the adapter you want to reset.
Click [OK] to reset the adapter and close the screen.
Click [Cancel] to close the screen without performing any operation.

* The indoor unit state is displayed soon after the reset, it may not be correct. Wait for about 5 to 20 minutes before you perform an operation to give the adapter time to stabilize.
* When resetting an adapter, take care that the schedule control time and data collection time (0, 15, 30, and 45 minutes) do not overlap.

11-5. System maintenance mode

[Procedure]
On the menu bar, select Maintenance - System maintenance mode.
<Password: Level 3>

Minimize the P-AIMS system screen in order to display the communication programs running in the background of the P-AIMS system.When minimization is finished, the communication programs running in the background are displayed and arranged automatically.



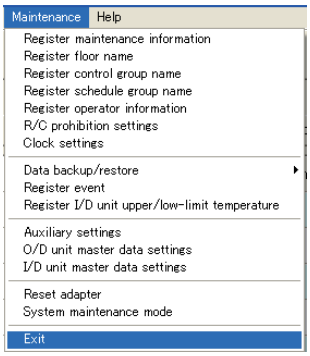
* The figure indicates the case where three lines are used.The number of windows displayed varies depending on the system configuration.

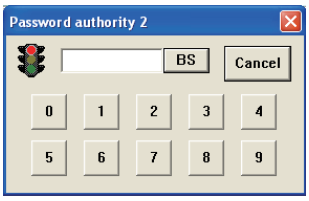
To return to the P-AIMS system, move the mouse pointer to the bottom of the screen or press the Windows key to display the taskbar, and then click the P-AIMS icon (indicated by the red circle below) in the taskbar.When the P-AIMS system returns, the communication programs and the like disappear.

11-6. Ending system

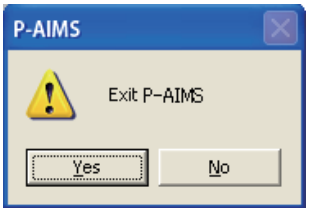
[Procedure]
On the menu bar, select Maintenance - Exit.
<Password: Level 2>

The P-AIMS system must be ended before the power of the personal computer is turned off.Be sure to follow the procedure below.
Select the menu item.
(1) Enter the Level 2 password.





(2) The Exit P-AIMS screen appears if you enter the correct password.
Click Yes .
The P-AIMS system ends.

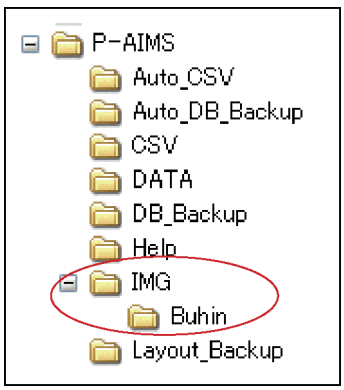


12. Master Registration of Layout Display Software

The operation manual of the Layout Display Software includes all of the function registration and operation procedures. Refer to the manual.

12-1. Dedicated folders for Layout Display Software

When you install the Layout Display Software, the folders indicated by the circle in the figure on the right are created.
Place and use the bitmaps of the layout diagrams in the IMG folder, and place and use the bitmaps of the part diagrams in the Buhin folder.
The size of the bitmaps of layout diagrams is 1,010 by 596.



12-2. Registering parts

The standard parts for use with the P-AIMS system are pre-registered.
The following shows the parts that are registered as standard parts.

Indoor units: The numbers enclosed in parenthesis are part numbers.

Unidirectional ceiling cassette (000)

4-directional ceiling cassette (001)

Bidirectional ceiling cassette (002)

Ceiling built-in cassette (004)

Built-in, all ducts (005)

Ceiling-embedded, high static pressure (006)

Ceiling suspended (007)

Wall mounted (008)

For kitchen use (009)

Perimeter, floor standing (011)

Floor standing (PAC Espa) (013)

Outdoor units: The numbers enclosed in parenthesis are part numbers.

ESPA (000)

ESPA (001)

GHP (010)

GHP (011)

MULTI (020)

Accumulated value : The numbers enclosed in parenthesis are part numbers (optional Distribution Ratio Software is required).

Wattmeter (000)

Gas meter (001)

Water meter (002)

Digital point : The numbers enclosed in parenthesis are part numbers (optional Facility Control Software is required).

Fan (000)

Pump (001)

Analog point : The numbers enclosed in parenthesis are part numbers (optional Facility Control Software is required).

Celsius temp (000)

percentage (001)

Current (002)

Voltage (003)

Fahrenheit temp (004)

Large, medium, and small size parts of these part diagrams are registered.Use part diagrams of the size that matches the size of the layout diagram

The following describes the registration of parts other than standard parts.
The file names of parts are configured as [Part Type Name][Part Number][Part State Number][Part Size].bmp. Therefore, the file name of a part indicates the role of the part.For example, “01_0000101.bmp” indicates “indoor unit/unidirectional ceiling cassette/stop/large.”
[Part Type Name] is included in a file under the file name of “BuhinSyurui.dat” in the Buhin folder.
The figure on the right shows the content of “BuhinSyurui.dat.” The lines with “;” on the very left are remarks.They have no meaning to the P-AIMS system. Therefore, the lines up until “;Filename,Type No.” have no meaning because they are just remarks.
The following content is registered from “;Filename,Type No.”
The meaning of “01_,1” is that the part with the file name beginning with “01_” is a part that has the function of “1.”Function “1” is an ID unit (indoor unit).
The meaning of “02_,2” is that the part with the file name beginning with “02_” is a part that has the function of “2.”Function “2” is a Digital point.
Therefore, the names used for registering the parts are “01_******.bmp” for the indoor unit, “02_******.bmp” for the sequencer, and “03_******.bmp” for the outdoor unit.

```
;;;;;;;;;;;;;;;;;;;;;;;;;;
;Type of parts = Filename
;TYPE = 1   :ID unit
;TYPE = 2   :Digital point
;TYPE = 3   :OD unit
;TYPE = 4   :Analog point
;TYPE = 5   :Non
;TYPE = 6   :Pulse
;Type of parts = Filename
;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;Type of parts = Filename
01_,1
02_,2
03_,3
04_,4
05_,5
06_,6
;
```

In addition to part names, there are also rules for indicating the operation states.
[Part Type Name][Part Number][Part State Number][Part Size].bmp

[Part Type Name]	:”01” and the like indicated in “BuhinSyurui.dat.”
[Part Number]	:Any 3-digit number from 000 to 999.
[Part State Number]	:2-digit number. See the figure on the rightand the figure below.
[Part Size]	:1: Large, 2: Medium, 3: Small When parts have the sameshape, use this when distinguishing them by size.

[Part State Number] for Indoor Unit

01 Stop	: (Green)
02 Heating	: (Red)
03 Cooling	: (Blue)
04 Blowing	: (Gray)
05 Dry	: (Light Blue)
06 Auto	: (Red/Blue)
07 Alarm	: (Yellow)
08 Installation	: (Brown)
09 Operating	: (Red)
For local adapter	

[Part State Number] for Facility Control

01 Stop	: (Green)
02 Operating	: (Red)
07 Alarm	: (Yellow)
08 Installation	: (Brown)

A portion of a part for use in a layout display can be made transparent.
The pink portion of becomes transparent in the layout display.
The color code for the transparent color is RGB (255, 0, 255).
Finally, when a layout is to be displayed on the Web, it is necessary to register the parts with the same files name and the “gif” extension so that they can become parts for the Web.
For example, if the file name of a part for a P-AIMS layout is “01_000011.bmp,” a GIF file with the file name “01_000011.gif” is required for Web use.Save the parts to the same Bushin folder.
Use 24-bit bitmaps for the colors for handling BMPs of parts.Take care because tone reduction may cause colors to change.

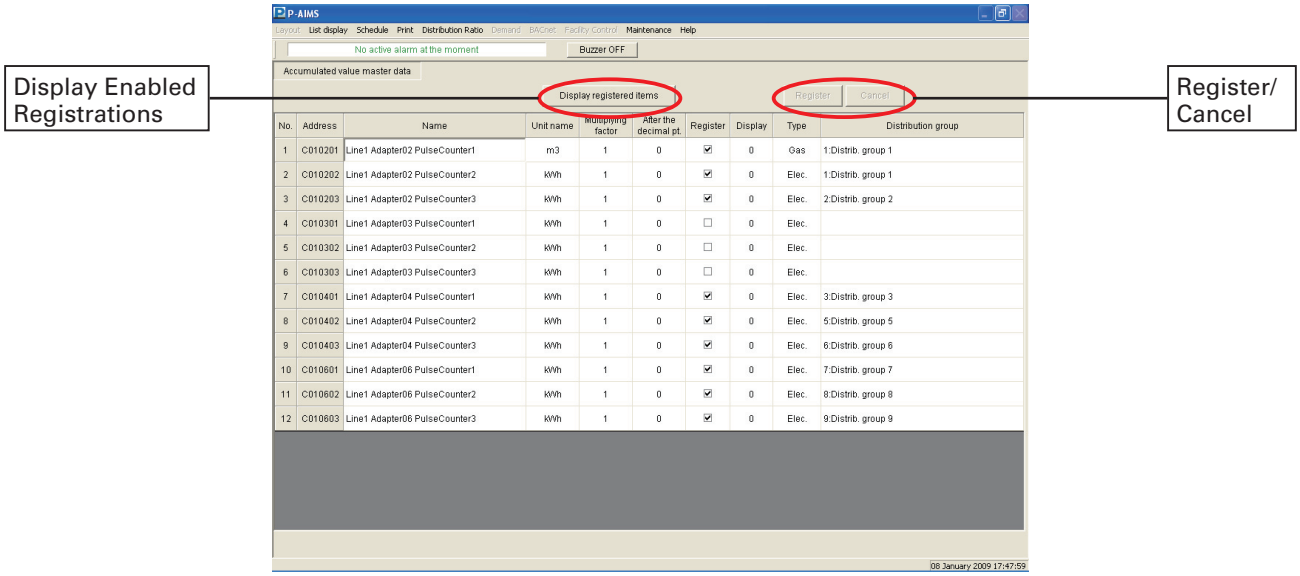
13. Master Registration of Distribution Ratio Software

This section describes the procedure for master registration, which is not included in the operation manual for the Distribution Ratio Software.

13-1. Registering accumulated value master

[Procedure]
On the menu bar, select Distribution ratio - Maintenance - Accumulated value master.
<Password: Level 3>

Configure the settings for input of the pulse counter of the adapter.


Display Enabled Registrations
Register/ Cancel
P-AIMS
List display
Schedule
Print
Distribution Ratio
Maintenance
Help
No active alarm at the moment
Buzzer OFF
Accumulated value master data
Display registered items
Register
Cancel
No.
Address
Name
Unit name
Multiplying factor
After the decimal pt.
Register
Display
Type
Distribution group
1 C010201 Line1 Adapter02 PulseCounter1 m3 1 0 Gas 1:Distrib. group 1
2 C010202 Line1 Adapter02 PulseCounter2 kWh 1 0 Elec. 1:Distrib. group 1
3 C010203 Line1 Adapter02 PulseCounter3 kWh 1 0 Elec. 2:Distrib. group 2
4 C010301 Line1 Adapter03 PulseCounter1 kWh 1 0 Elec.
5 C010302 Line1 Adapter03 PulseCounter2 kWh 1 0 Elec.
6 C010303 Line1 Adapter03 PulseCounter3 kWh 1 0 Elec.
7 C010401 Line1 Adapter04 PulseCounter1 kWh 1 0 Elec. 3:Distrib. group 3
8 C010402 Line1 Adapter04 PulseCounter2 kWh 1 0 Elec. 5:Distrib. group 5
9 C010403 Line1 Adapter04 PulseCounter3 kWh 1 0 Elec. 6:Distrib. group 6
10 C010601 Line1 Adapter06 PulseCounter1 kWh 1 0 Elec. 7:Distrib. group 7
11 C010602 Line1 Adapter06 PulseCounter2 kWh 1 0 Elec. 8:Distrib. group 8
12 C010603 Line1 Adapter06 PulseCounter3 kWh 1 0 Elec. 9:Distrib. group 9
08 January 2009 17:47:59

Display registered items :Displays only items with a check mark in the Registered column.

Register :Registers the changes.

Cancel :Returns to the state before the changes.

Explanation of column titles

Address	:Indicates the address of the adapter.
Name	:Indicates the name of the adapter.
Unit Name	:Indicates the unit for the usage counter (indicated automatically according to type).
Multiplying Factor	:Specify the multiplying factor for the number of input pulses.
Number of decimal places	:Specify the number of decimal places for when displaying the accumulated value.
Register	:Enables registration.
Display Order	:Specify the display order.
Type	:Specify the input pulse type.
Distribution Group	:Specify the distribution group.

13-1-1. Display method

13-1-1-1. Displaying enabled registrations

Clicking Display registered items so that the button is pressed in like this Display registered items displays only pulse counters with a check mark in the Registered column.Clicking the button again returns the button to its original state and displays all of the pulse counters.

13-1-2. Change Method for accumulated value master

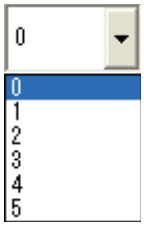
13-1-2-1. Changing names

To change the name of the pulse counter, double-click the Name column.It is possible to change part of the name of a previously registered pulse counter.However, to change the entire name, just type in the name.The existing name will be deleted and only the new name will be displayed.

13-1-2-2. Setting multiplying factor

Specify the pulse counter pulse multiplying factor.Click the corresponding column to display as shown in the figure on the right, and then click to display the pull-down menu.Select the required multiplying factor.Select the multiplying factor from "0.001," "0.01," "0.1," "0.5," "1," "10," "100," and "1000."For example, if you select "0.1," the display becomes 1 when the number of input pulses becomes 10.

13-1-2-3. Setting number of decimal places



Specify the number of decimal places for displaying the accumulated value.Click the corresponding column to display as shown in the figure on the right, and then click to display the pull-down menu.Select the required number of decimal places.Select the number of decimal places from "0," "1," "2," "3," "4," and "5."For example, if you select "1," the display becomes "0.0."Use this in combination with the multiplying factor in the section above.

* If the number of decimal places is 0 for a multiplying factor of "1," 1 for a multiplying factor of "0.1," 2 for a multiplying factor of "0.01," and so on, the indication becomes easy to read.

13-1-2-4. Enabling/disabling registrations

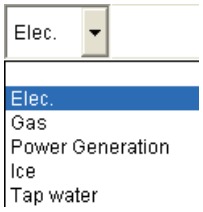
To make a registration after changing the name and other information, click this registration frame, and select the checkbox.Selecting the checkbox enables the registration.Clicking the checkbox again clears the check mark and disables the registration.

13-1-2-5. Registering and changing display order

Enter the display order for when displaying accumulated values.In this system, "0" is handled as being at the bottom in the display order.The display order indication is 4 digits of only numbers.

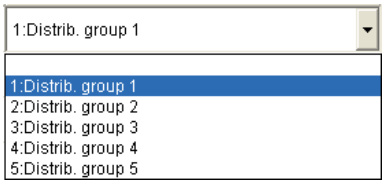
13-1-2-6. Setting types

Set the type input for the pulse counter of an adapter.
Specifying the type in this column displays the unit corresponding to the Unit Name column.
"Electric Power" => "kWh" "Gas" => "m3" =>"Power Generation" => "m3" "Ice" => "kWh"
"Water" => "m3". The distribution calculation is in accordance with this type.



13-1-2-7. Setting distribution group

Specify what the distribution group data is for the pulse data input for the pulse counter of the adapter.Even if multiple pulse counters are specified, the accumulated total is calculated and distribution is performed.



13-1-2-8. Registering changed data

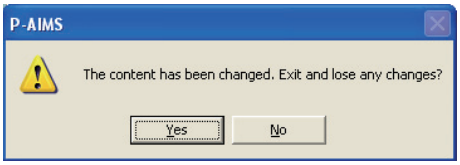
Click Register to register the changed data.All of the changed data is registered.

13-1-2-9. Canceling settings

Click Cancel to return to the previously registered state.

13-1-3. Confirming changes

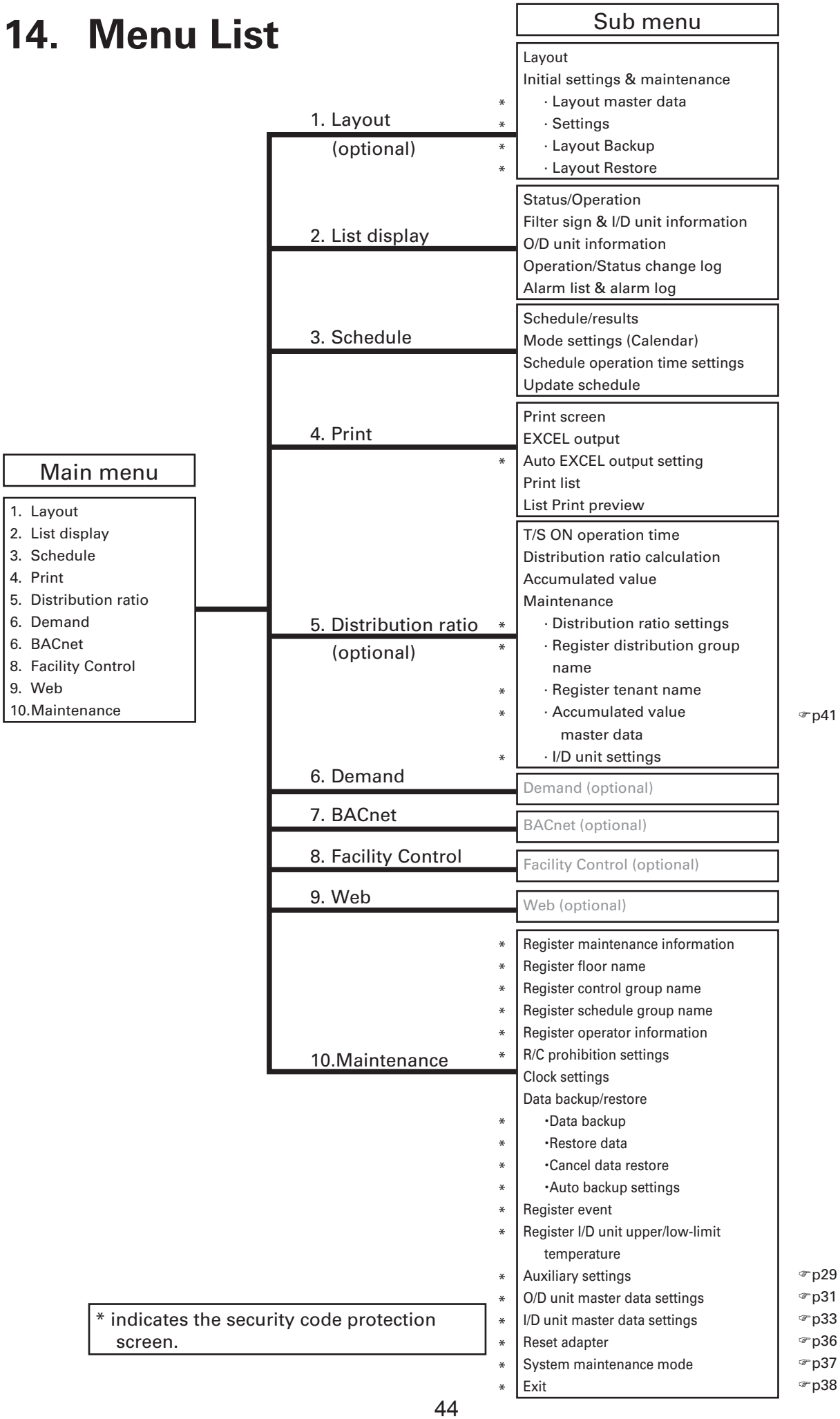
If you change the information of the accumulated value master and then attempt to switch to another screen without saving the changes, a change confirmation message appears.



Click Yes to switch to the other screen without registering the changes.

Click No to repeat the operation of this screen.

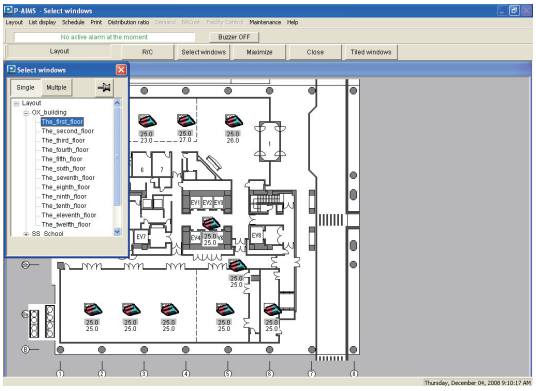
14. Menu List


Main menu
1. Layout
2. List display
3. Schedule
4. Print
5. Distribution ratio
6. Demand
6. BACnet
8. Facility Control
9. Web
10.Maintenance
Sub menu
1. Layout
(optional)
Layout
Initial settings & maintenance
* · Layout master data
* · Settings
* · Layout Backup
* · Layout Restore
2. List display
Status/Operation
Filter sign & I/D unit information
O/D unit information
Operation/Status change log
Alarm list & alarm log
3. Schedule
Schedule/results
Mode settings (Calendar)
Schedule operation time settings
Update schedule
4. Print
Print screen
EXCEL output
* Auto EXCEL output setting
Print list
List Print preview
5. Distribution ratio
(optional)
T/S ON operation time
Distribution ratio calculation
Accumulated value
Maintenance
* · Distribution ratio settings
* · Register distribution group name
* · Register tenant name
* · Accumulated value master data
* · I/D unit settings
☞p41
6. Demand
Demand (optional)
7. BACnet
BACnet (optional)
8. Facility Control
Facility Control (optional)
9. Web
Web (optional)
10.Maintenance
* Register maintenance information
* Register floor name
* Register control group name
* Register schedule group name
* Register operator information
* R/C prohibition settings
Clock settings
Data backup/restore
* •Data backup
* •Restore data
* •Cancel data restore
* •Auto backup settings
* Register event
* Register I/D unit upper/low-limit temperature
* Auxiliary settings ☞p29
* O/D unit master data settings ☞p31
* I/D unit master data settings ☞p33
* Reset adapter ☞p36
* System maintenance mode ☞p37
* Exit ☞p38
* indicates the security code protection screen.

15. Explanation of Functions of Each Menu

15-1. Layout display (optional layout display software is required)

15-1-1. Layout display

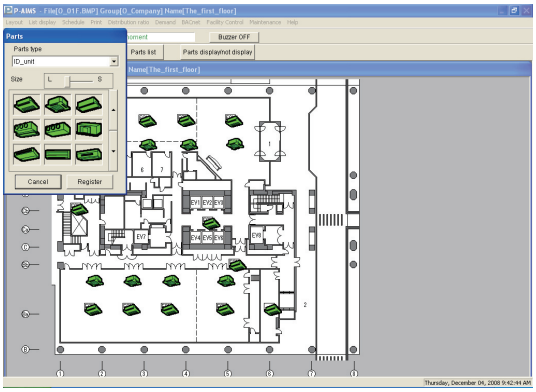


- This allows you to monitor the current start/stop, heating/cooling mode, and temperature setting statuses of each device for status monitoring on the layout.If the optional Facility Control Software is installed, digital inputs/outputs and analog data are also monitored.
- Monitoring of alarms (failures)
  If an alarm (failure) is generated, the status of the applicable device is indicated in yellow and the mode flashes.
  If the optional Facility Control Software is installed and the alarm setting is configured, alarms are displayed.
- This allows you to select each device and then perform start/stop, cooling/heating mode, temperature setting, fan speed, airflow direction, and central control operations.If the optional Facility Control Software is installed, you can perform start/stop operations.

15-1-2. Maintenance (for layout display)

15-1-2-1. Layout master

- This arranges the indoor units, outdoor units, facility devices, and the like on the layout screen.

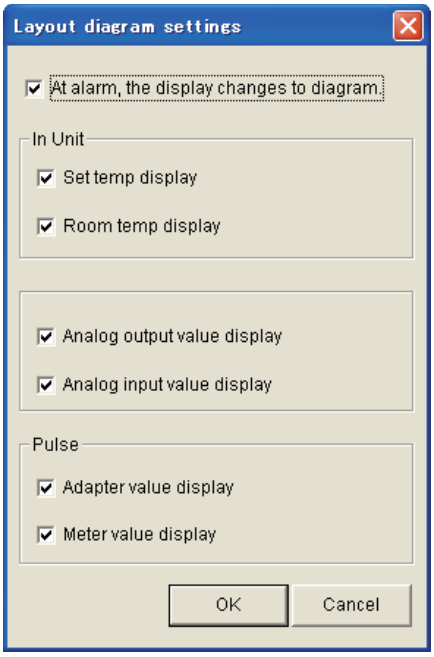


15-1-2-2. Settings

- If the alarm layout diagram display is set, when an alarm is generated, the layout screen for displaying that device is displayed.
- Set the temperature setting, room temperature, analog data, and other display method for indoor units, facility devices, and accumulated values.

15-1-2-3. Layout Backup

- This backs up the layout display data.When the layout changes, perform a backup.Store the backup data on the personal computer running the P-AIMS system and the external hard disk.This allows you to recover the data in the event of a failure of the personal computer.
- The initial setting for the folder of the backup destination is the folder ¥Layout_Backup¥ in which the P-AIMS system is installed. For example, in the case of the C drive, the folder is "C:¥P-AIMS¥Layout_Backup¥."

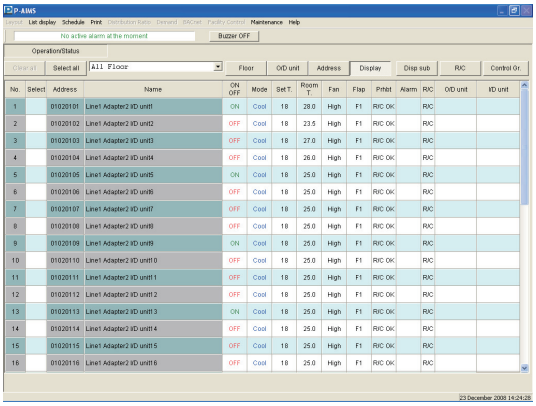


15-1-2-4. Layout Restore

- This restores backed up layout display data.If you restore data, the P-AIMS system needs to be restarted.The restore takes effect after the system has been restarted.

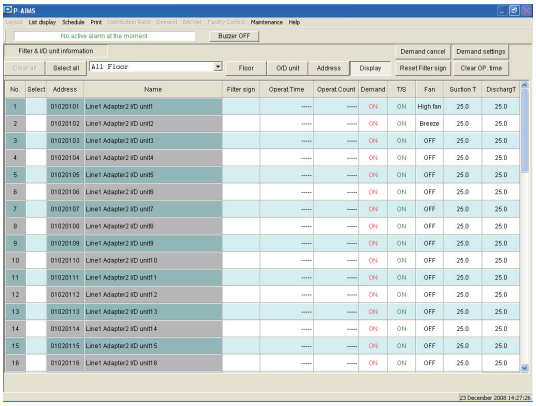
15-2. List display

15-2-1. Status/Operation



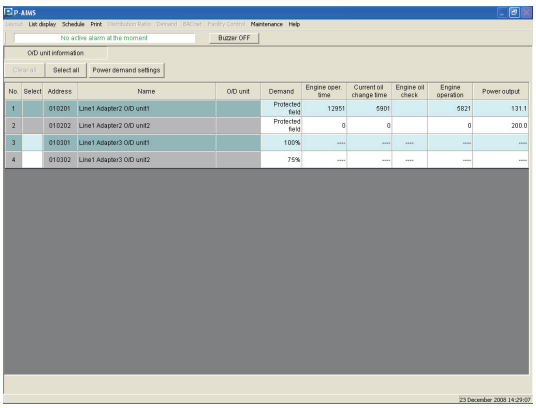
- Monitoring of status
  This allows you to always monitor the current start/stop, heating/cooling mode, temperature setting, room temperature, fan speed, airflow direction, and central control statuses of each device.
  If the optional Facility Control Software is installed, the digital inputs/outputs are also displayed.
- Monitoring of alarms (failures)
  If an alarm (failure) is generated, you are notified by an alarm generation message and the sounding of a buzzer.
  If the optional Facility Control Software is installed and the alarm setting is configured, alarms are displayed.
- Operation output
  This allows you to perform start/stop, cooling/heating mode, temperature setting, fan speed, airflow direction, and central control operations for each device in the list.Furthermore, if the operation output is the same, multiple devices can be operated simultaneously.Start/stop operations are also possible for each control group.
  If the optional Facility Control Software is installed, you can perform start/stop operations.

15-2-2. Filter sign & I/D unit information



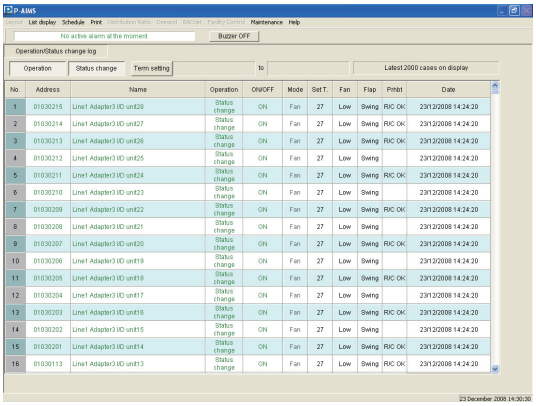
- This allows you to always monitor the filter sign of the indoor units monitored.If a filter sign occurs, the filter indication appears on the indoor unit information screen.
  There is no alarm log display and alarm generation message.Furthermore, the buzzer does not sound.If the maintenance setting is made, a filter indication appears in the indoor unit information screen, but the reset operation cannot be performed.
- Monitoring of indoor unit information
  The operation count, fan status, intake temperature, and blow-out temperature are displayed for each indoor unit (CZ-10APB3 connection).

15-2-3. O/D unit information



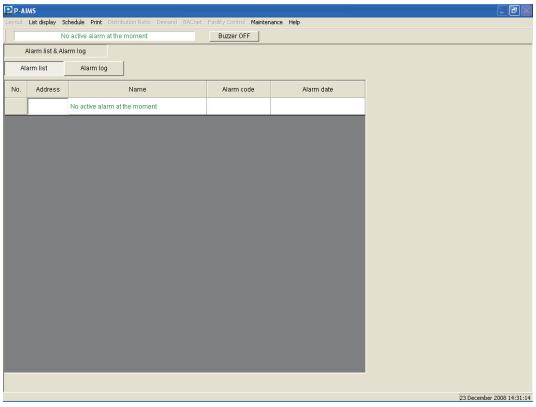
- This displays the operation time, operation count, and oil inspection sign for outdoor units. Demand setting can be configured for an outdoor unit of an electric-type air conditioner which supports the demand setting.
- Monitoring of engine oil inspections
  This sets engine oil inspections of each outdoor unit (GHP only) to be always monitored.If an engine oil inspection is needed, the oil inspection sign is indicated on the outdoor unit information screen.It is displayed in the alarm log, and an alarm generation message is displayed and a buzzer sounds.The status monitoring screen alarm column displays the alarm code in a case in which this is handled as an alarm code.
- Monitoring of outdoor unit information
  The outdoor unit demand setting can be configured.For the electric type only, the outdoor unit engine operation time and the operation time after an oil change are displayed. For GHP only, the amount of electric power generated by High Power Excel is also displayed.

15-2-4. Operation/Status change log

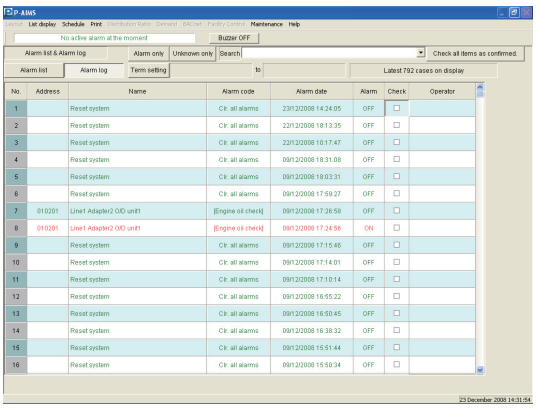


- This displays a list of the current start/stop, heating/cooling mode, temperature setting, room temperature, fan speed, airflow direction, central control, and alarms statuses of each device monitored.Furthermore, if those values are changed, the changes are displayed in real time.
- Status change/operation log display
  The status changes of each device up until now and logs of operations performed by the P-AIMS system are output (automatic Excel output) in one-day units.The log list can contain up to 400,000 items (60,000 items per file).
- Log operation
  The past 200,000 items of operation data are stored, and all the items for one day are stored even if that number of items is exceeded. At the point in time the next day starts, the data that exceeds 200,000 items is deleted sequentially from the oldest data.Furthermore, you can also specify a period for which to search and display data.The logs of the indoor units for which the status change of each device occurred are displayed.You can specify a period in order to display the logs for a certain period.Furthermore, by setting extraction conditions, you can also apply filters to the display in order to display only specific logs.

15-2-5. Alarm list & alarm log



- If alarms are generated, you can display only those alarms that are currently activate in order to make it easy to check them.
- Alarm generation message display
  The Alarm Display Area at the top of the screen displays the newest alarm (failures) that was generated.If multiple alarms were generated, the most recent alarm is displayed.Furthermore, you are also notified at the same time by the buzzer sounding.The buzzer of the personal computer is used as the buzzer.
- Alarm generation continuous status display
  With regards to alarms that continue to be currently activate, they are displayed sequentially from the most recent one in a list.When an alarm is recovered, it is deleted from the list.Up to 2,000 alarms can be displayed in the list.

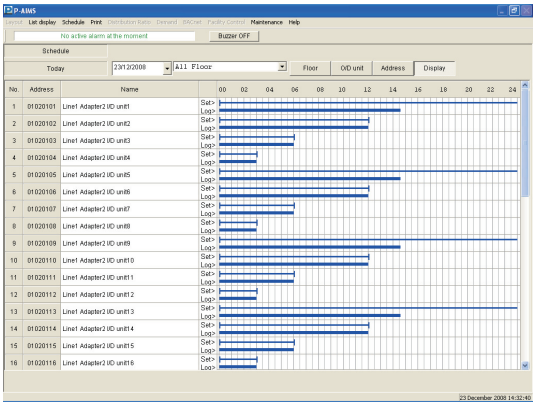


- Alarm log display
  This displays a list of generated and recovered alarms, including alarms (failures) that continue to be currently active.Up to 2,000 alarms can be displayed in the list.The past 10,000 items of alarm log data are stored, and the data that exceeds that number is deleted sequentially from the oldest data.Furthermore, you can also specify a period for which to search and display data.The generated alarms are output (automatic Excel output) in one-month units.The log list can contain up to 10,000 items.
- Unconfirmed alarm display
  This displays a log of alarms that have not been confirmed by the operator, including alarms (failures) that are still active.It is also possible to register the operator who confirmed an alarm. Up to 2,000 alarms can be displayed in the list.

15-3. Schedule

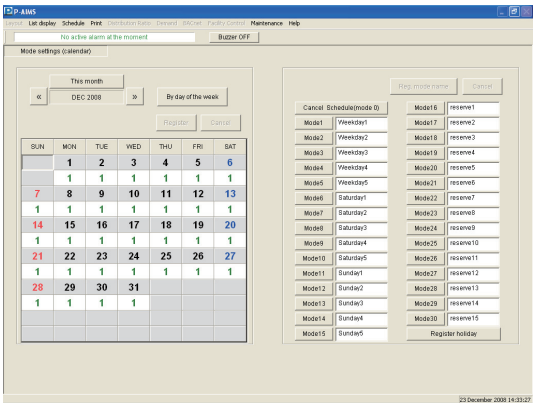
15-3-1. Schedule/results

- This displays the schedule and results of indoor units in bar graph form.
  The displayed term can be specified in order to check the presetting status, the working status of a device relative to its schedule, or other information.
- If the optional Facility Control Software is installed, the instructions of facility control devices can also be checked.
  However, in the case of facility control devices, even if operation instructions are output, the operation status cannot be monitored if the digital inputs that can be checked are not specified.



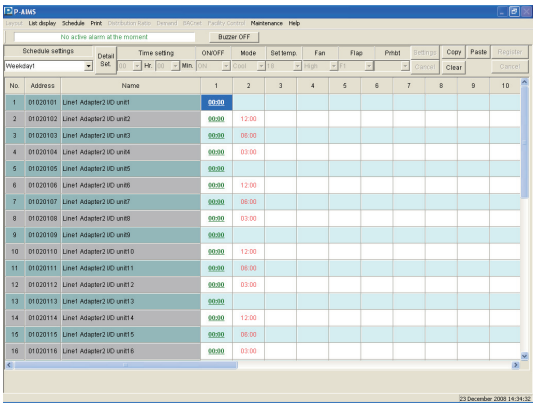
15-3-2. Mode settings (Calendar)

- Start/stop by schedule pattern modes
  There are 30 mode (comment input is possible) settings that can be configured for the start/stop pattern by schedule, and a mode can be specified daily or for day of the week on a calendar.With each mode, any operation time (ON/OFF) can be set up to 20 times for each device.The calendar schedule can be set for up to one year in advance including the current month.



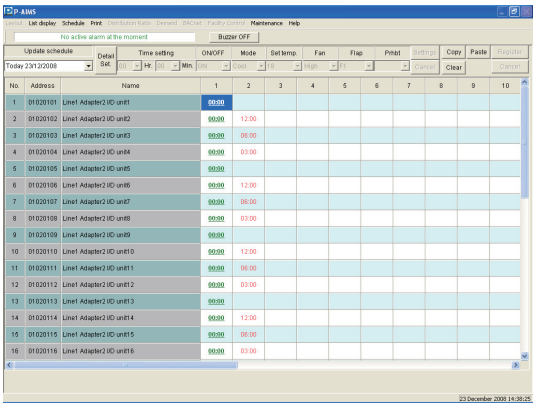
15-3-3. Schedule operation time settings

- Setting range
  The settable range is start, stop, cooling/heating mode, temperature setting, fan speed, airflow direction, and central control.If the settings are changed, you can select whether the settings are reflected the same day, next day, or the day after the next day.
- If a schedule group is registered, the table becomes for the schedule group (figure on the right).However, if a schedule group is not registered, the schedule group name column in the figure on the right becomes the indoor unit name column.In such a case, specify settings by individual indoor unit.



15-3-4. Update schedule

- Changing settings immediately before Schedule registration of time changes for only the same day, next day, or the day after the next day is possible.
- If a schedule group is registered, the table becomes for the schedule group (figure on the right).
  However, if a schedule group is not registered, the schedule group name column in the figure on the right becomes the indoor unit name column.In such a case, specify settings by individual indoor unit.



15-4. Print

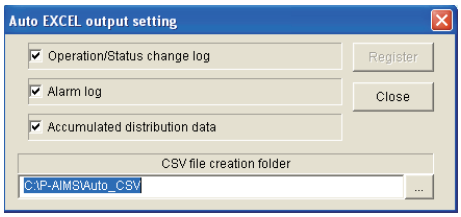
15-4-1. Print screen

- This allows you to print a hard copy of the screen displayed in each screen.

15-4-2. Excel output

- Saving alarm log and operation/status log data
  This allows you to save alarm log and operation/status log data to external storage media in CSV format.
- Saving air conditioning energy data (Distribution Ratio Software is required)
  This allows you to save air conditioning energy data to external storage media in CSV format.
- The saved data can be used with general-purpose software (Microsoft Excel).

15-4-3. Auto EXCEL output setting



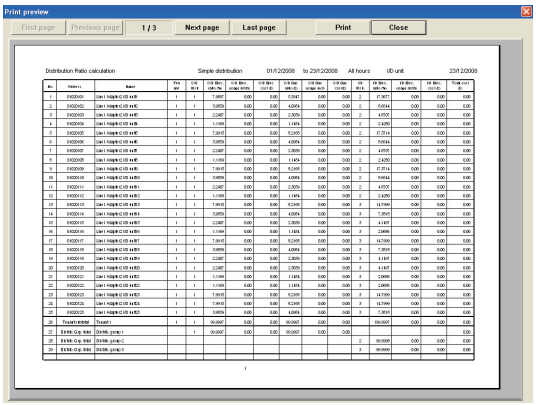
- Saving alarm log and operation/status log data
  This allows you to automatically save alarm log and operation/status log data every day to external storage media in CSV format.
- Saving air conditioning energy data (Distribution Ratio Software is required)
  This allows you to automatically save air conditioning energy data every day to external storage media in CSV format.
- Set a specified file to be saved as a CSV file to a specified folder every day.

15-4-4. Print list

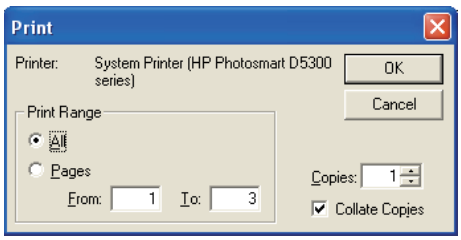
- When the indoor unit distribution ratio calculation screen (Distribution Ratio Software is required) is displayed, clicking this menu item prints the distribution ratio calculation list table.
- This menu item cannot be selected if no printer is installed.

15-4-5. List print preview

- When the indoor unit distribution ratio calculation screen (Distribution Ratio Software is required) is displayed, clicking this menu item displays a preview of the distribution ratio calculation list table.
- This is convenient for confirming the calculation screen.You can also specify the pages to print in order to print only the required parts.

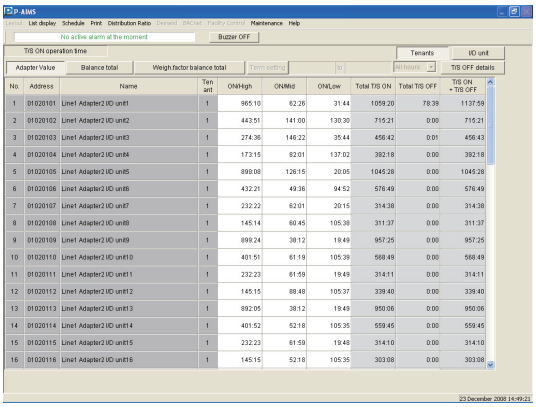


- This menu item cannot be selected if no printer is installed.



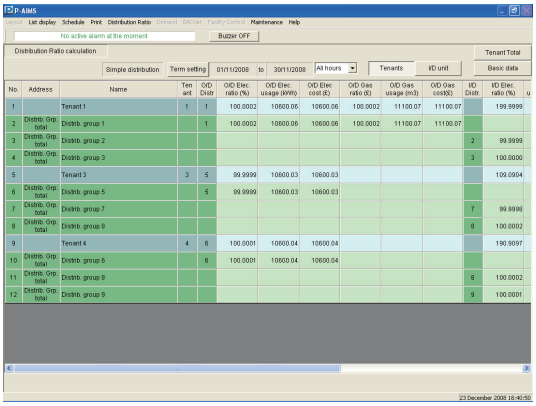
15-5. Distribution ratio (optional Layout Display Software is required)

15-5-1. T/S ON operation time



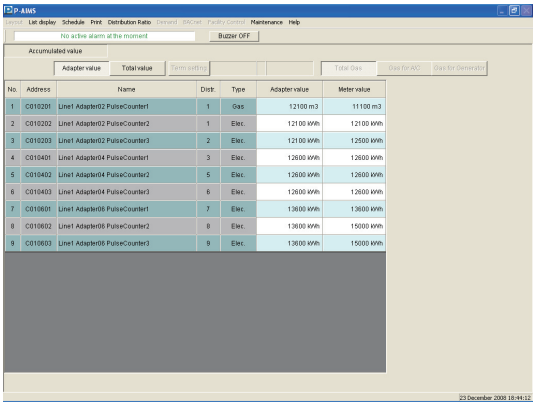
- This displays items such as “Adapter Value,” which indicates the thermostat data held by the adapter or indoor unit, or thermostat on/off times for the air conditioner, “Balance total,” which indicates the time for each fan speed with the thermostat on balanced in units of xx minutes, and the cumulative total of those balance values, and “Weight factor balance total,” which indicates the results of multiplying the values set for thermostat on time conversion coefficients of various settings by the fan speed conversion values.
- [Adapter Value]: Directly displays the adapter values.
- [Balance total]: Displays the total when the specified term and time zone (all hours, regular hours. out of hours, and specified days) have been specified.
- [Weight factor balance total]: Displays the total obtained by multiplying the total calculated in [Balance total] by a factor taking into account the capacity of the indoor unit.

15-5-2. Distribution ratio calculation



- Air conditioning energy distribution data display
  This displays the simple distribution and load distribution separately.
  With simple distribution, the outdoor unit electricity and indoor unit electricity can be calculated as separate distribution groups.
  The distribution method needs to be specified in advance.
- If the electricity and gas price rates are specified, the charges are calculated.
- The accumulated data is read at intervals of 15 minutes.

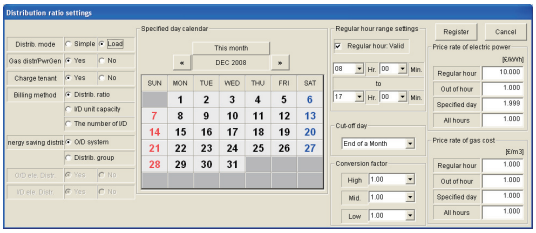
15-5-3. Accumulated value



- Accumulated value display
  This displays a list of the accumulated values from the electricity and gas meters.
- [Adapter value]: Displays the adapter value.
- [Term total value]: Calculates and displays the accumulated values of the specified term separately for all hours, regular hours, out of hours, and specified days.

15-5-4. Maintenance (for distribution ratios)

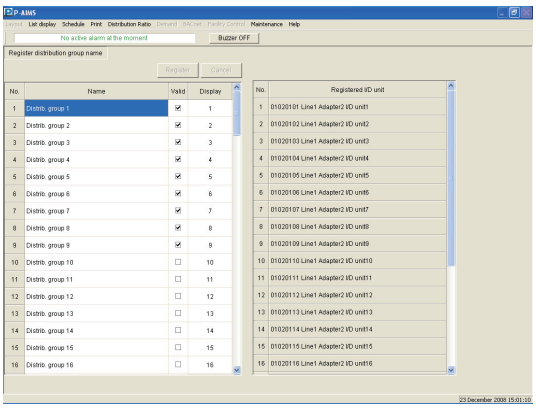
15-5-4-1. Distribution ratio settings



- Set the distribution method (simple distribution, load distribution), specified day setting, regular hour range setting, cut-off days of accumulated data, conversion factor by individual fan speeds for weighting, and electricity and gas price rates. This is for when specifying the distribution method.

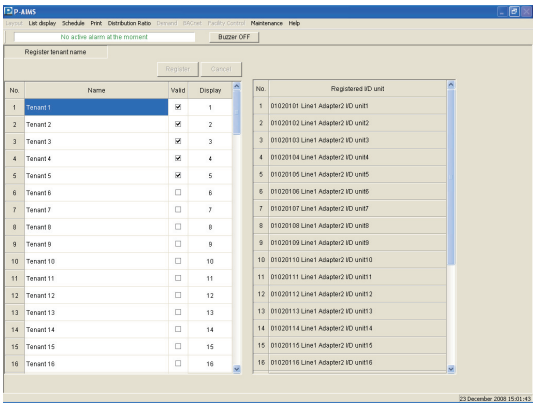
15-5-4-2. Register distribution group name

- This is for changing, adding, and deleting distribution group names.In order to select a distribution group for the accumulated points settings and indoor unit master registration, a distribution group needs to be registered in this screen first.
- A list of registered indoor units is also displayed.



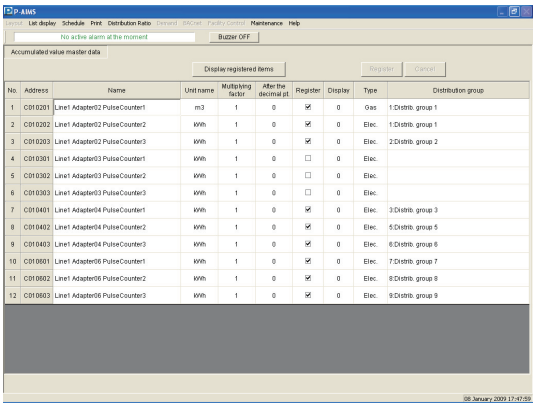
15-5-4-3. Register tenant name

- This is for changing, adding, and deleting tenant names.In order to select a tenant for indoor unit master registration, a tenant needs to be registered in this screen first.
- A list of registered indoor units is also displayed.



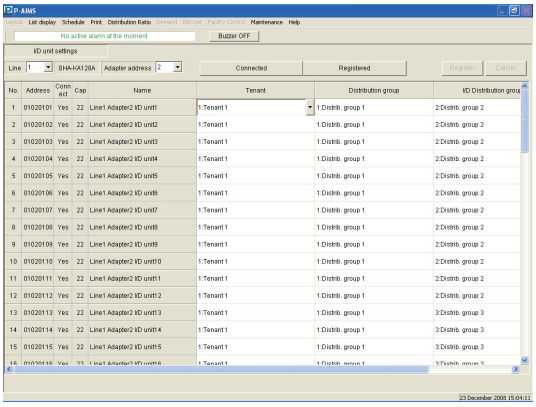
15-5-4-4. Accumulated value master data

- This is for registering the unit, multiplying factor, type, and distribution group of the point connected to the pulse counter of the adapter. Assigning a name to the point improves ease of understanding.
  This data is the accumulated values for electricity and gas that form the basis of distribution.
- For the registration method, see "13-1 Registering the Accumulated Value Master."



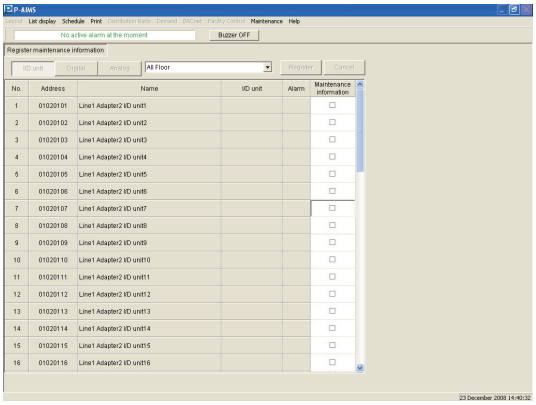
15-5-4-5. I/D unit settings

- This is for registering the information for calculating the distribution ratio, such as tenant, outdoor distribution group, indoor distribution group, electric heater capacity, indoor fan coefficient, and fixed indoor unit capacity.



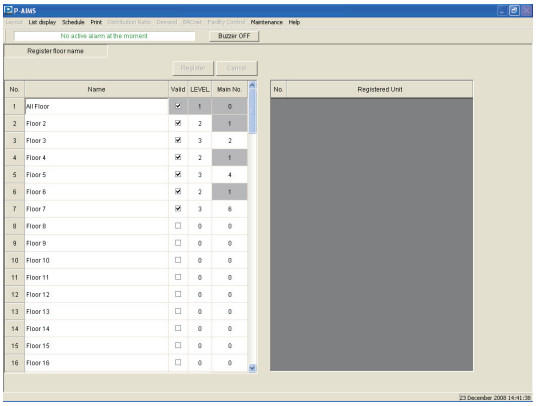
15-6. Maintenance (Basic Software)

15-6-1. Register maintenance information



- Registering maintenance information
  This allows equipment and devices under maintenance to be registered for maintenance. For equipment and devices that are registered for maintenance, operation is prohibited from the P-AIMS system and alert (failure) monitoring is stopped.If maintenance registration is performed while an alarm is active, the indication in the alarm column of the status monitoring screen becomes maintenance, and the status in the alarm log becomes recovered.There is no alarm generation message and sounding of a buzzer. The alarm indication in the alarm column of the maintenance setting screen becomes recovered.If an alarm is generated after maintenance registration, the indication in the alarm column of the status monitoring screen becomes maintenance, and an alarm indication is not displayed in both the alarm log and the alarm column of the maintenance setting screen.Event control and schedule control cannot be performed while the maintenance setting is configured.

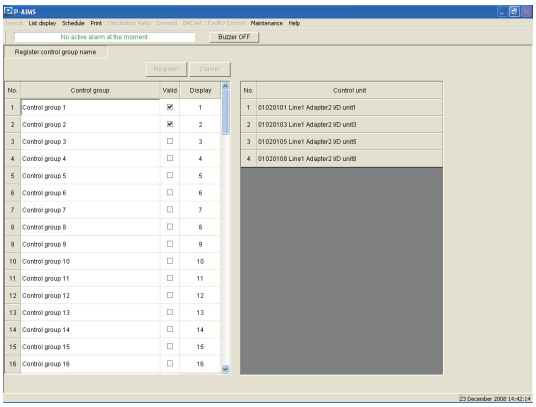
15-6-2. Register floor name



- Set the floor levels for selecting floors in screens such as the status monitoring/operation screen.

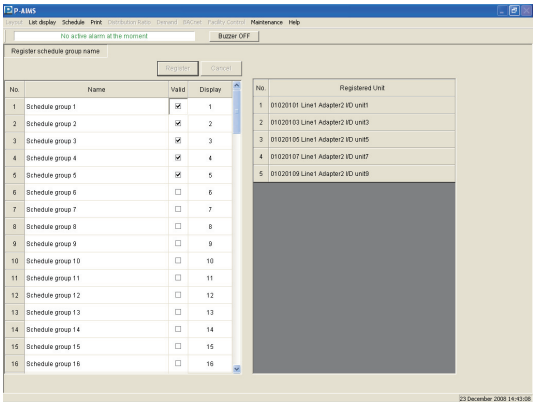
  The registered devices are displayed.

15-6-3. Register control group name



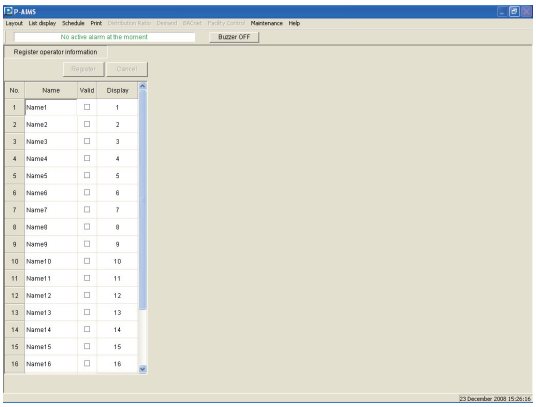
- Control groups
  For each indoor unit registered to the control group, you can change the operations and settings for start/stop, cooling/heating mode, temperature setting, fan speed, airflow direction, central control performed by control group in the status monitoring/operation screen.
  Control group selection is performed when events are set.
  The registered devices are displayed.

15-6-4. Register schedule group name



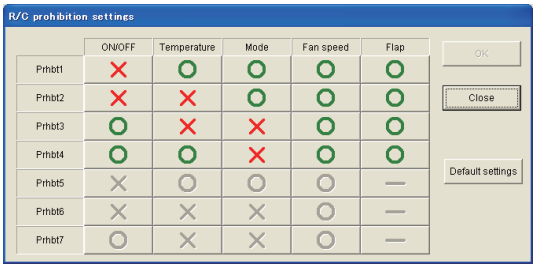
- Schedule control
  For each indoor unit registered to the schedule group, automatic start/stop operation in accordance with the schedule can be set.
  1) There are 30 mode (comment input is possible) settings available for start/stop patterns by schedule, and a mode can be specified daily or for day of the week on a calendar.
  2) With each mode, any operation time (ON/OFF) can be set up to 20 times for each device.
  3) The calendar schedule can be set for up to one year in advance including the current month.
  4) The settable range is start/stop, cooling/heating mode, temperature setting, fan speed, airflow direction, and central control.
  5) Schedule registration of time changes for only the same day, next day, or the day after the next day is possible.
  6) The registered devices are displayed.

15-6-5. Register operator information



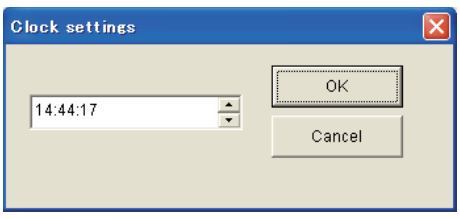
- This allows you to register the name of the operator.In order to confirm the alarm logs, the name of the operator needs to be registered in this screen first.

15-6-6. R/C prohibition settings



- Remote control prohibition/permission operations
  The items that can be prohibited are start/stop, cooling/heating mode, temperature setting, fan speed, and airflow direction.
  The central control settings 5 to 7 below can be set for the E and F type GHP, and the S and R type PAC.
  The central control settings 1 to 4 can be set for the B, A, U, and T type PAC and the K, J, H, and G type GHP.Any combination of the prohibition items of central control 1 to 4 is possible.

15-6-7. Clock settings



- Set the time of the personal computer.
  In the P-AIMS system, the time needs to be corrected gradually because problems occur with the thermostat ON time and the obtaining of accumulated values if an extreme change is made to the time.

15-6-8. Data backup/restore

15-6-8-1. Data backup

- This allows you to back up the P-AIMS system.
  However, the CSV files output with Excel output or automatic Excel output are not backed up.

15-6-8-2. Restore data

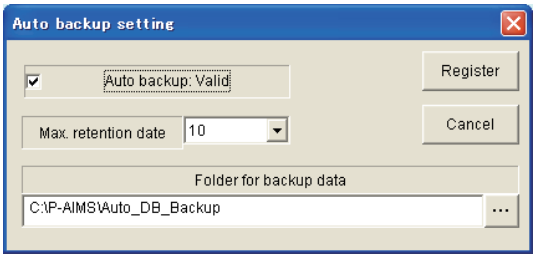
- This allows you to use a backup created with the P-AIMS system or files created with an automatic backup to restore data.

15-6-8-3. Cancel data restore

- This function is for returning to the original state when "Restore data" in the previous section has been executed.
  (* The "Cancel data restore" menu item becomes available for selection after "Restore data" is executed.)

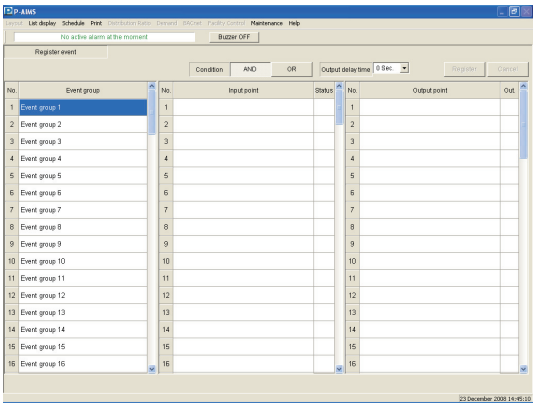
15-6-8-4. Auto backup settings

- This sets backups to be made automatically every day.
  (Considering the likelihood of trouble occurring with the personal computer, we recommend connecting an external hard disk drive to the personal computer and saving the backup data to that drive. This will make restoring the system easy.)



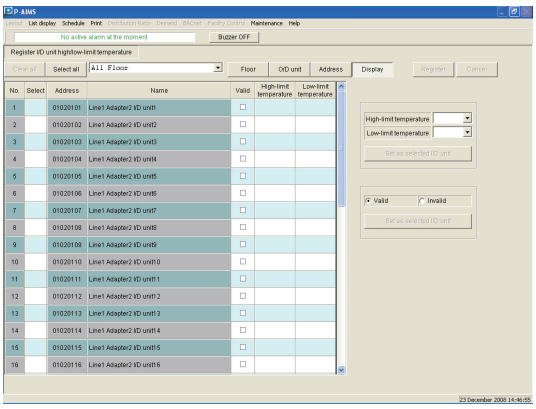
15-6-9. Register event

- Event control
  For equipment and devices registered to the event group, linked start and stop operations can be performed in accordance with set input conditions.
  Batch output is also possible.
  If the Facility Control Software is installed, operations such as stopping the operation of lighting linked to the air conditioner are possible.



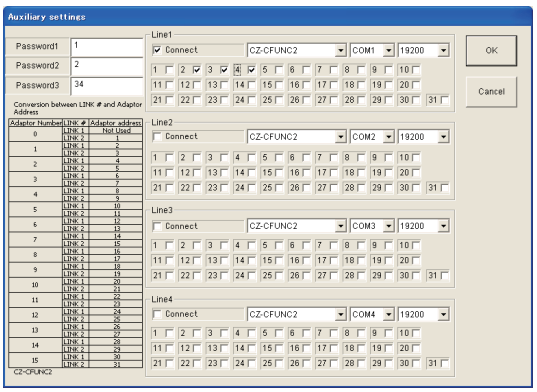
15-6-10. Register I/D unit upper/lower limit temperature

- This allows you to set the temperature setting range of indoor units individually for each indoor unit.This enables a temperature setting within an appropriate range.



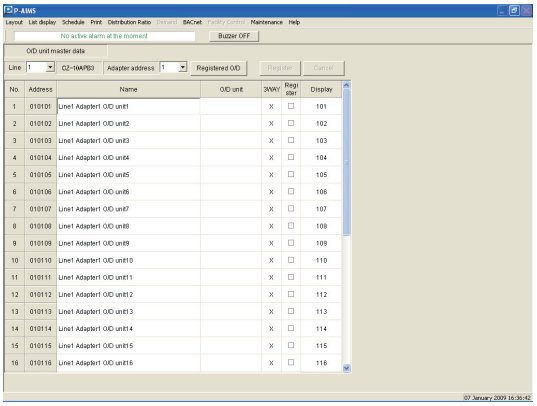
15-6-11. Auxiliary settings

- This configures the settings of the RS-485 communication conditions of adapters.Even if the communication conditions of adapters are changed, the conditions of the system are not changed.Restart P-AIMS.
  Adapter selection, address of the communication port, communication speed, adapter address, etc.
- Register a password for each level.The passwords are enabled at the point in time that they are registered.
- For the registration procedure, see "11-1. Auxiliary Settings."



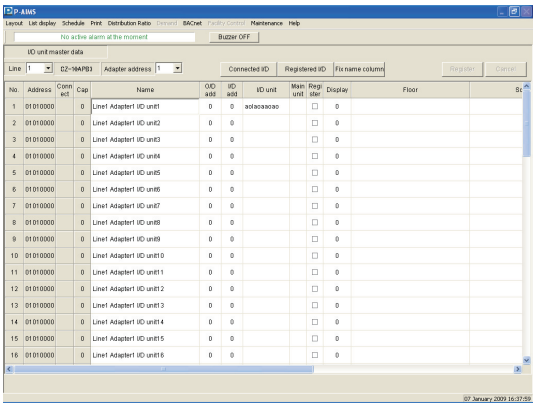
15-6-12. O/D unit master data settings

- For each line and adapter, register the outdoor unit names, outdoor unit codes, and display order of the outdoor units.
- For the registration procedure, see "11-2. Outdoor Unit Master."



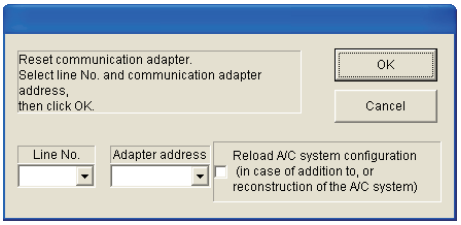
15-6-13. I/D unit master data settings

- For each line and adapter, register the indoor unit names, outdoor unit AD (outdoor unit (system) address), indoor unit AD (indoor unit address), display order, floor, tenant, distribution group, schedule group, control group, and other information of the indoor units.
- For the registration procedure, see "11-3. Indoor Unit Master."



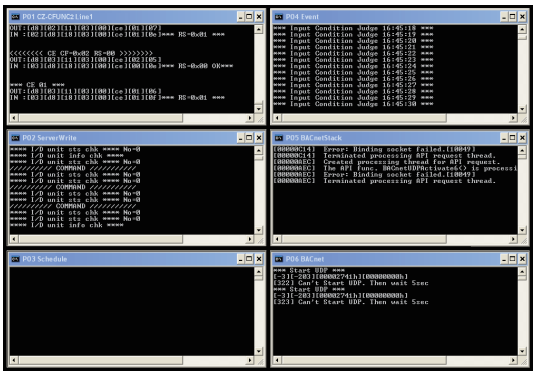
15-6-14. Reset adapter

- This resets an adapter.



15-6-15. System maintenance mode

- This sets the P-AIMS system to maintenance mode.A DOS window for displaying the communication status and other information is displayed.A DOS window is displayed for each job, so the number of DOS windows displayed varies depending on the system configuration.



15-6-16. Exit

- This ends the P-AIMS system.

16. About Adapters

- The P-AIMS system allows you to register adapter numbers 1 to 31.
- When you use communication adapters (CZ-10APB3), there are links 1 and 2 per adapter of the communication adapters.The P-AIMS system also recognizes the link numbers as adapter numbers, so the relation between the adapter numbers of P-AIMS and the communication adapter numbers and link numbers when communication adapters are used is as described below.
  (Adapter number of P-AIMS) = (communication adapter number) x 2 + (link number) - 1
  Therefore, be careful of the following points.Where a communication adapter is set to "0," the adapter numbers of P-AIMS become "0" for link 1 and "1" for link 2.Therefore, the adapter number "0" cannot be used in P-AIMS, so link 1, which becomes "0," cannot be used.

17. Troubleshooting

17-1. Communication error related

* Note : The following shows the meanings of indications.
  · Adapter : Communication adapter (CZ-10APB3)
  · P-AIMS : Total air-conditioning controller (CZ-CSWKC2)
  · Main board : CZ-10APB3 main board of communication adapter.

17-1-1. "Disconnected" error is displayed for some air-conditioning equipment

(1) Detection method

The state above occurs when the adapter was unable to receive the data from the unit side within the specified time or longer or an error was detected with the received data.
Here, "unit" refers to the following equipment.
· Indoor units, outdoor units, and local adapters (for on/off and for communication conversion)

(2) Troubleshooting

<table>
<tr><td rowspan="4">1
Units</td><td rowspan="2">1-1</td><td rowspan="2">Is there any unit for which the power is turned off?</td><td>Yes</td><td>Turn on the power.</td></tr>
<tr><td>No</td><td>1-2</td></tr>
<tr><td rowspan="2">1-2</td><td rowspan="2">Is there any looseness, disconnection, break, or short at the connection parts of the indoor/ outdoor operation line?</td><td>Yes</td><td>Fix the wiring.</td></tr>
<tr><td>No</td><td>1-3</td></tr>
<tr><td>1-3</td><td>Is there any of the following problems with the installation of the indoor/outdoor operation line?
· The line runs together with the power line
· There are branches in more than 16 points
· The total length exceeds 1 km
· Another branch is installed after a branch
· There is a "star-like branch" (multiple connection branch)
· The distance between one branch point and another is within 2 m
· There is a termination resistor setup problem (too many or too few)
· If a shielded cable is used, the shield is grounded at both ends or not grounded</td><td>Yes</td><td>Remedy the problem with the installation.</td></tr>
<tr><td colspan="3"></td><td>No</td><td>2-1</td></tr>
<tr><td rowspan="2">2
Communication adapter</td><td rowspan="2">2-1</td><td rowspan="2">Is there any looseness, disconnection, break, or short of the wires of numbers 0 and 1 (LINK1) or numbers 3 and 4 (LINK2) of the 20-pin terminal block on the main board?</td><td>Yes</td><td>Fix the wiring.</td></tr>
<tr><td>No</td><td>3</td></tr>
<tr><td colspan="5">3
Replace the main board of the adapter for which the alarm is displayed.</td></tr>
</table>

17-1-2. "Disconnected" error is displayed for all air-conditioning equipment connected to communication adapter

(1) Detection method

The state above occurs when P-AIMS was unable to receive the data within the specified time or longer or an error was detected with the received data.

(2) Troubleshooting

1 Communication adapter (power system)		For which adapter number is an error displayed?		
	1-1	Is something indicated on the 7-segment LED (6 LEDs) on the main board?	Yes	2-1
			No	1-2
	1-2	Is the power switch on the main board turned on?	Yes	1-3
			No	Turn on the power.
	1-3	Are the connectors on the main board disconnected, broken, or the like? · CN012 (white, 4-pin) (Adapter only)	Yes	Fix the wiring.
			No	1-4
	1-4	(Adapter only) Are the connectors on the power board disconnected, broken, or the like? · CN1 (white, 5-pin) · CN2 (white, 4-pin)	Yes	Fix the wiring.
			No	1-5
	1-5	Has the fuse (F401) of the main board blown?	Yes	Replace the fuse.
			No	2-1
2 Communication adapter (communication system)	2-1	Is there any looseness, disconnection, break, or short of the wires of numbers 11 and 12 "ADAPT" (RS-485) of the 20-pin terminal block on the main board?	Yes	Fix the wiring.
			No	2-2
	2-2	Is the polarity correct for the wires of 11 and 12 "ADAPT" (RS-485) of the 20-pin terminal block on the main board? (There is a + and a -.)	Yes	3-1
			No	Fix the wiring.
3 Installation and setup related	3-1	Was the adapter number setting of the main board changed after P-AIMS was started once?	Yes	Restore the setting or check the configuration.
			No	3-2
	3-2	Is the "LINK Connection Yes/No" setting of the main board correct? (See the "Communication adapter installation instruction manual.")	Yes	3-3
			No	Correct the setting.
	3-3	For the main board of the adapter of a bus terminator, is the jumper plug CN032 set to "B" (termination resistor exists)? *If the communication converter connected to the personal computer is set as the terminator of the wiring, set this to termination resistor exists.	Yes	3-4
			No	Set "B."
	3-4	For the main board of an adapter of other than a bus terminator, is the jumper plug CN032 set to "A" (termination resistor does not exist)?	Yes	3-5
			No	Set "A."
	3-5	Is there any of the following problems with the installation of the communication adapter operation line? · The line is bundled together with or runs together with the power line · The total length exceeds 1 km · The line is not in a bus configuration (a branch exists) · A shielded cable is not used · The shield is grounded at both ends or not grounded	Yes	Remedy the problem with the installation.
			No	4
4 Recheck the board(s) of the adapter for which the alarm is displayed (main board or power board, or both boards)				

17-1-3. "Communication error" is displayed for all communication adapters connected to communication converter, and "Disconnected" is displayed for air-conditioning equipment

(1) Detection method

The state above occurs when P-AIMS was unable to receive the data from all communication adapters connected to the communication converter within the specified time or longer.

(2) Troubleshooting

1 P-AIMS communication converter	1-1	Is the software supplied with the communication converter installed correctly?	Yes	1-2
			No	Install the software.
	1-2	Is the number of the COM port displayed in Device Manager of Windows XP correct? If it is difficult to check the number, check it by disconnecting and the re-connecting the USB cable of the communication converter.Check the COM port by showing and hiding the COM port.	Yes	1-3
			No	Take a note of the COM number and proceed to 1-3.
	1-3	Are the adapter name, COM port number, and baud rate of the Auxiliary settings of Maintenance configured correctly? Set the number confirmed in 1-2 as the COM port number.	Yes	1-4
			No	Reconfigure the settings.
	1-4	Is the communication converter connected correctly, including the ground wire, in accordance with the instruction manual supplied with the communication converter?	Yes	(End)
			No	1-5
	1-5	Has the COM port number not changed? Depending on the maker of the communication converter, the COM port number may sometimes change when the USB connector of the PC is disconnected and then re-connected or a different USB connector is connected. We recommend to avoid disconnecting and re-connecting the connector of the COM port unnecessarily after the settings have been configured correctly.	Yes	1-6
			No	Reconfigure the settings.
	1-6	Is the communication converter not locked? Disconnect the USB connector of the communication converter, turn the power off, re-connect the USB connector, and check the number of the COM port.	Yes	(End)
			No	1-7
	1-7	Check the USB cable connections, and restart the personal computer.Recheck in accordance with the instruction manual supplied with the communication converter.		

17-2. Screen display related

17-2-1. Screen operations are not possible (mouse and keyboard do not work)

(1) Troubleshooting

1 P-AIMS	1-1	Are the connectors of the mouse and keyboard disconnected?	Yes	Connect the connectors.
			No	1-2
	1-2	Is one of the following processes being performed? · Backup · Restore	Yes	Wait for the process to end.
			No	1-3
	1-3	Restart the personal computer on which P-AIMS is installed. When the personal computer restarts, does the mouse and keyboard work?	Yes	(End)
			No	1-4
	1-4	Recheck the operation of the personal computer referring to the instruction manual supplied with the personal computer.		

17-2-2. Nothing is displayed on screen

(1) Troubleshooting

1 P-AIMS	1-1	Are the power switches of the personal computer and display turned on?	Yes	1-7
			No	1-2
	1-2	Is the power turned off?	Yes	1-3
			No	Turn on the power.
	1-3	Recheck the operation of the personal computer referring to the instruction manual supplied with the personal computer.		

17-2-3. Not even one indoor unit or only small number of indoor units is displayed on screen

(1) Troubleshooting

1 P-AIMS	1-1	Is the setting of the adapter board set to "Air-conditioning equipment connected: No"? (See the "Communication adapter installation instruction manual.")	Yes	Set "Yes" and perform a configuration check.
			No	1-2
	1-2	Does the air-conditioning equipment have 17 or more links connected? Is 9 or more communication adapters connected to each communication converter? (Use with 8 or less communication adapters.)	Yes	Reduce the number of links to within 16.
			No	1-3
	1-3	Is the adapter number of the communication adapter 0? If the adapter number is 0, the air-conditioning equipment connected to link 1 is not displayed.	Yes	Change the adapter number.
			No	1-4
	1-4	See the "Unconnected" items, and check all content that is the same.		

17-2-4. Cannot enter screen selected in menu

(1) Troubleshooting

1 P-AIMS	1-1	Is any optional software installed? Optional software need to be purchased (sold separately).	Yes	(End)
			No	1-2
	1-2	Is a password registered? (Maintenance – Auxiliary settings) *For password-protected screens, refer to the instruction manual and technical documentation.	Yes	(End)
			No	

17-2-5. Distribution ratio and usage amount are indicated as 0

If the distribution ratio is "0%, start from "1-1."

If the distribution ratio is displayed but the usage amount is "0," start from "1-7."

(1) Troubleshooting

1 P-AIMS	1-1	When time zone accumulation is performed, is the displayed time zone selection correct ? (All hour/Regular hour/Out of hour/Specified day)	Yes	1-2
			No	Select the correct time zone.
	1-2	When the operation times of indoor units belonging to that tenant (Distribution ratio/T/S ON operation) are checked on the screen, are they all "0:00"?	Yes	1-3
			No	1-4
	1-3	If the operation time is 0 hours, 0 is indicated for all of the distribution ratio, price rate, and usage amount.(End)		
	1-4	Is tenant registration complete in the screen of Distribution ratio – Maintenance – I/D unit settings?	Yes	1-5
			No	1-7
	1-5	Is distribution group registration complete in the screen of Distribution ratio – Maintenance – I/D unit settings?	Yes	1-6
			No	1-7

	1-6	In the case of a tenant that is configured from the local adapter, is a capacity fixed value set? (Distribution ratio – Maintenance – I/D unit settings)	Yes	1-8
			No	1-7
	1-7	Are the settings of 1-4, 1-5, and 1-6 configured correctly?(*) Furthermore, if 0 is indicated for the usage amount, proceed to 1-8.		
	1-8	Is the count input from the pulse meter? (Check this from the screen of Distribution ratio – Accumulated value.)	Yes	1-9
			No	*1
	1-9	Is the setting of the pulse unit amount complete? (Screen of Distribution ratio – Accumulated value master data)	Yes	
			No	Configure the setting.

*1 Perform the troubleshooting in the section "18-2-6. Pulse count is not input normally."

17-2-6. Pulse count is not input normally

(1) Troubleshooting

1 P-AIMS	1-1	Is the distribution group configured correctly in the screen of Screen of Distribution ratio – Maintenance – Accumulated value master data?	Yes	1-2
			No	Configure the setting.
	1-2	If you specify a term in the screen of Distribution ratio – Accumulated value, can you view the display of data currently being accumulated?	Yes	View the display of data currently being accumulated.
			No	1-3
	1-3	When time zone accumulation is performed, is the displayed time zone selection correct ? (All hour/Regular hour/Out of hour/Specified day) (Screen of Distribution ratio – Maintenance – Distribution ratio settings)	Yes	2-1
			No	Select the correct time zone.
2 Communication adapter	2-1	Is the cable from the pulse meter connected correctly? Is there any incorrectly connected terminal, disconnection, break, or short? (Pins 1 to 3 of the 20-pin terminal block on the main board) For pins 1 to 3, gas or electricity pulse meters can be assigned freely. Pin 1 (Nos. 6 and 7) Pin 2 (Nos. 6 and 8) Pin 3 (Nos. 6 and 9)	Yes	2-2
			No	Fix the wiring.
	2-2	Disconnect all of the wires of the pulse meter from the terminal board, and then look at the Distribution ratio – Accumulated values creen of P-AIMS while using an appropriate piece of wire or lead wire, or the like to short the inputs(pins 1 to 3) of the termina lblock several times. Does the number of pulses in crease normally? (The display may sometimes take 15 minutes to be updated.)	Yes	3-1
			No	2-32-4
	2-3	Replace the main board.		
	2-4	If the distance between the pulse meter and communication adapter is 20 m or more, install a relay.Even if the distance is within 20 m, install a relay if you are worried about the influence of noise.		
3 Pulse meter	3-1	Is the wiring of the communication adapter correct? Is there not a disconnection, break, or short at the terminals on the meter side?	Yes	3-2
			No	Fix the wiring.
	3-2	Is the signal line from the pulse meter definitely wired to the non-voltage a contact (relay contact)? *In the case of open collector output, there is polarity. (No. 6 is the plus, and Nos. 7, 8, and 9 are minus.)	Yes	3-3
			No	Fix the wiring.

	3-3	Disconnect the wires from the terminals, and then look at the screen of "2-4 Pulse meter" of P-AIMS while shorting those wires several times. Does the number of pulses increase normally? (The display may sometimes take 15 minutes to be updated.)	Yes	3-4
			No	Perform 2-1 again.
	3-4	Is there not a mistake with the connections of the electricity meter and power supply line and the gas flowmeter and fuel gas pipe?	Yes	3-5
			No	Fix the connections.
	3-5	Is not the meter model or setting larger than that required for the electricity amount or gas flow rate per pulse?	Yes	3-6
			No	Change the meter model or correct the setting.
	3-6	Inspect the pulse meter side.		

17-2-7. Accumulated operation time (or distribution ratio) is counted even though operation is not being performed

(1) Troubleshooting

1 P-AIMS	1-1	Is the accumulation time zero? (The distribution ratio is counted.)	Yes	*1
			No	1-2
	1-2	Did you not start operation but rather forget to stop operation? The operation log can be checked on the screen displayed by clicking List display – Operation / Status change log.	Yes	(End)
			No	1-3
	1-3	Did the program timer operate? (Remote control, other centralized control device, external input, etc.)	Yes	(End)
			No	1-4
	1-4	Are there any signs that an indoor unit was forcefully operated from a personal computer or other device during a service or maintenance?	Yes	(End)
			No	1-5
	1-5	When time zone accumulation is performed, is the displayed time zone selection correct ? (All hour/Regular hour/Out of hour/Specified day)	Yes	1-6
			No	Select the correct time zone.
	1-6	(When using time zone distribution) Is the time zone setting or distribution specified day setting correct?	Yes	1-7
			No	Correct the setting.
	1-7	(When using time zone distribution) Is the off timer set to the same time or a time close to that for switching the time zone?	Yes	Correct the settings.*2
			No	

*1 With the load distribution method, the standby power portion is distributed even if operation is not performed.

*2 Avoid setting the off timer to a time within approximately 10 minutes before the time for switching the time zone.

17-2-8. Cannot back up or restore data to hard disk of personal computer

(1) Troubleshooting

1 Hard disk	1-1	Is the hard disk installed correctly?	Yes	1-2
			No	Install the hard disk.
	1-2	Is the drive number of the external hard disk correct? In the case of a USB external hard disk, the drive number may sometimes change if other USB memory is used at the same time.	Yes	1-3
			No	Do not connect USB memory or the like or another external drive.
	1-3	Does the problem still occur when a different external hard disk drive is used?	Yes	1-4
			No	(End)
	1-4	Recheck the instruction manuals for the personal computer and hard disk.		

17-3. Unit operation related

17-3-1. Schedule timer does not work correctly

(1) Troubleshooting

1 P-AIMS	1-1	Were the Mode settings (Calendar) and Schedule operation time settings configured correctly?	Yes	1-2
			No	Configure the settings.
	1-2	Is the schedule operation time setting selected for the indoor unit? (Screen of Schedule – Schedule operation time settings)	Yes	1-3
			No	Configure the settings.
	1-3	Is the schedule for the indoor unit registered on the Schedule/results screen?	Yes	1-4
			No	Configure the settings.
	1-4	Is the timer operation mode of that indoor unit configured correctly for that day? (Screen of Schedule – Mode settings)	Yes	(End)
			No	1-5
	1-5	Are the current date and time settings correct?	Yes	1-6
			No	Reconfigure the settings.
	1-6	Did any of the following occur at the timer time? · Indoor unit power failure · P-AIMS power failure · Communication adapter power failure · Error communicating with air-conditioning equipment caused by some other reason	Yes	(End)
			No	1-7
	1-7	Are the settings configured so that units within one outdoor unit system will be in different cooling/heating modes? (The timer does not work because the cooling and heating modes do not match.)	Yes	Correct the timer settings.
			No	1-8
	1-8	Is a setting invalid for a model set? (Example: heating operation is started for a model designed specifically for cooling only)	Yes	Correct the timer settings.
			No	1-9
	1-9	Are the settings configured so that the mode is changed directly from cooling (dry) to heating (or vice versa)?	Yes	1-11
			No	1-10
	1-10	Is the timer of other equipment (remote control, weekly timer, etc.) being used in conjunction with the timer?	Yes	Check for conflicting settings.
			No	
	1-11	Set the timer so that the equipment is stopped or blowing is performed once one minute (example) before the switching of cooling and heating modes.		

17-3-2. I want to start or stop operation for all indoor units by external contact input

This can be achieved by registering an event.You can specify the input of a communication adapter as an input point, and all indoor units, control groups, and individual indoor units as output points. (Maintenance – Register event)

17-3-3. I want unit alarm to be detected and then external alarm output turned ON

This can be achieved by registering an event.You can specify all air-conditioning alarms as input points, and the output of all indoor unit adapters as output points. (Maintenance – Register event) Note that the engine cleaning sign, engine oil inspection sign, and remote control inspection sign are not output as unit alarms.

17-3-4. Prohibit remote control use is set but setting returns to permit individual

(1) Troubleshooting

1 P-AIMS	1-1	Is a central addresses set? Confirm and set the address using the remote control, system controller, or the like. (The P-AIMS unit does not have a function for confirming and setting the central addresses.)	Yes	2-1
			No	Configure the setting.
2 ON/OFF controller	2-1	Is "Switch ON/OFF controller main/sub" of the ON/OFF controller that is also installed set to OFF (main).	Yes	Set ON (sub).
			No	2-2
	2-2	Is "Switch centralized control main/sub" of the ON/OFF controller that is also installed set to OFF (main).	Yes	Set ON (sub).
			No	2-3
	2-3	Re-check the ON/OFF controller.		

17-3-5. Cannot print with printer

(1) Troubleshooting

Printer	1-1	Are you using a recommended printer? Are you using a printer for Windows XP? Check the instruction manual supplied with the printer.	Yes	1-2
			No	Use a recommended printer.
	1-2	Is the power of the printer turned on?	Yes	1-3
			No	Turn on the power.
	1-3	Is the printer in the online state?	Yes	1-4
			No	Set the printer to the online state.
	1-4	Is paper loaded in the printer?	Yes	1-5
			No	Load paper in the printer.
	1-5	Refer to the instruction manual of the printer and check whether the cause is other than the above. Is it still not possible to print after checking the instruction manual and taking the appropriate measures?	Yes	1-6
			No	(End)
	1-6	Is the printer cable connected correctly? · P-AIMS side · Printer side	Yes	1-7
			No	Connect the cable.
	1-7	Is printing still not possible after replacing the printer cable?	Yes	2
			No	(End)
2 Try using the printer to print a document from Notepad that is supplied with Windows.If printing is still not performed correctly, re-check the instruction manuals supplied with the printer and personal computer.				